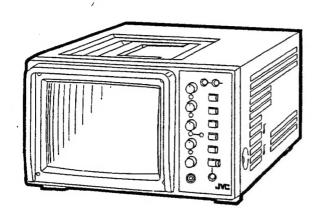
JVC

SERVICE MANUAL

COLOUR VIDEO MONITOR

TM-600PN-E



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SPECIFICATIONS

ltem	Content	Item	Content
Туре	Colour video monitor	Input A,B	Video-BNC
Colour system	NTSC/PAL system		1VP-P,75ohms,negative sync
CRT	15cm(measured diagonally)		Bridged connection is possible
	,90°deflection,in-line gun,vertical pitch		(A termination switch is provided)
	stripe phosphor of 0.42mm(A14JJD68X)		Audio-RCA pin connector
Audio output	0.5W 8Ω 10% THD		390mVrms,high impedance
Speaker	8cm round ×1		Bridged connection is possible
Screen size(H×V)	4-7/16"×3-5/16"	EXT sync	BNC
Scanning	NTSC(H)15.625kHz,(V)59.94Hz		4VP-P,75ohms,negative sync
frequency	PAL(V)15.625kHz,(V)50Hz		Bridged connection is possible
Horizontal	More than 250 lines	Weight	4.9kg
Resolution		Accessories	Power cord (approx 2.0m) × 1
Power	AC100 to 120V,50/60Hz;		Screen hood ×1
requirements	DC12V		Rear Guard ×1set
P o w e r AC0.57A,DC2.7A			Inner battery adapter ×1
consumption			

Design & specification subject to change without notice.

Note:

The model number **TM-600PN-E** is not a correct number.

The correct number is "TM-600PN".

SAFETY PRECAUTIONS

- The design of this product contains special hardware, many circuits and components specially for safety purposes.
 - For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
- Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
- 8. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual many create shock, fire, or other hazards.
- Don't short between the LIVE side ground and NEU-TRAL side grounding or EARTH side ground when repairing.

Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE () side GND, the NEUTRAL() side GND and EARTH () side GND. Don't short between the LIVE side GND and NEUTRAL side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and NEUTRAL side GND or EARTH side GND at the same time. If above note will not be kept, a fuse or any parts will be broken.

- If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See AD-JUSTMENT OF B1 POWER SUPPLY).
- 6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approvided by the manufacturer of the complete product.
- 7. Do not check high vollage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.
- 8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

9. Isolation Check

(Safety for Electrical Shock Hazard)

After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) Dielectric Strength Test

The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second.

(.... Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)

This method of test requires a test equipment not generally found in the service trade.

(2) Leakage Current Check

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).

Alternate Check Method

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.35V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).

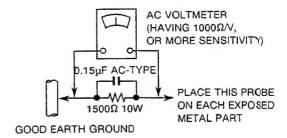


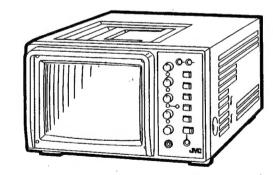
Fig.A

INSTRUCTIONS

JVC TM-600PN-E

COLOUR VIDEO MONITOR

BEDIENUNGSANLEITUNG: FARB-VIDEO-MONITOR MANUEL DINSTRUCTIONS: MONITEUR VIDEO COULEUR MANUALE DI ISTRUZIONI: VIDEO MONITOR A COLORI INSTRUCCIONES: MONITOR DE VIDEO A COLOR







OPERATING INSTRUCTIONS

Thank you for purchasing this JVC colour video monitor. Please carefully read this instruction manual for proper use.

SAFETY PRECAUTIONS

In order to prevent any fatal accidents caused by misoperation or mishandling of the monitor, be fully aware of all the following precautions.

WARNINGS

To prevent fire or shock hazard, do not expose this monitor to rain or moisture.

Dangerous high voltages are present inside the unit. Do not remove the back cover of the cabinet.

When servicing the monitor, contact qualified service personnel. Never try to service it yourself.

Machine Noise Information Ordinance 3. GSGV, January 18, 1991: The sound pressure level at the operator position is equal or less than 70 dB(A) according to ISO 7779.

Improper operations, in particular alteration of high voltage or changing the type of tube may result in x-ray emission of considerable dose. A unit altered in such a way no longer meets the standards of certification, and must therefore no longer be operated.

PRECAUTIONS

- Only use the power source specified on the rating label located on the bottom of the cabinet.
- When not using this unit for a long period of time, or when cleaning it, be sure to disconnect the power plug from the AC outlet.
- Do not allow anything to rest on the power cord.
 And do not place this unit where people will tread on the cord.
- Do not overload wall outlets or power cords as this can result in a fire or electric shock.
- Avoid using this unit under the following conditions:
- in extremely hot, cold or humid places.
- in dusty places,
- near appliances generating strong magnetic fields,
- in places subject to direct sunlight.
- in badly ventilated places,
- in automobiles with doors closed,
- Do not cover the ventilation slots while in operation as this could obstruct the required ventilation flow.
- When dust accumulates on the screen surface, clean it with a soft cloth.
- Unplug this unit from the AC outlet and refer servicing to qualified service personnel under the following conditions;
- when the power cord is frayed or the plug is damaged,

- if liquid has been spilled into the unit,
- if the unit has been dropped or the cabinet has been damaged,
- when the unit exhibits a distinct change in performance.
- Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Always refer servicing to qualified service personnel.
- When replacement parts are required, have the service personnel verify in writing that the replacement parts he/she uses have the same safety characteristics as the original parts. Use of manufacturer's specified replacement parts can prevent fire, shock, or other hazards.
- Upon completion of any servicing or repair work to this unit, please ask the service personnel to perform the safety check described in the manufacturer's service literature.
- When this unit reaches the end of its useful ille, improper disposal could result in a picture tube implosion. Ask qualified service personnel to dispose of this unit.
- If you do not use the unit for a long period of time, disconnect the power cord and remove the inner battery for battery-saving and safety purposes.

FEATURES

- Three types of power source can be selected as required: domestic AC outlets, inner batteries, and outer batteries.
- Battery saving function makes battery duration last longer.
- Built-in charge circuit for optional rechargeable batteries.
- LED indicates when the duration of rechargeable battery becomes almost empty.
- Two sets of video and audio input terminals.
- External sync signal input/output terminals.
- Compatible with NTSC and PAL colour systems.
- 15-cm picture tube reproduces bright and clear pictures.
- Space-saving design with convenient carrying handle.
- Screen hood useful to make outdoor viewing easier.

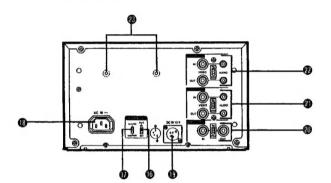
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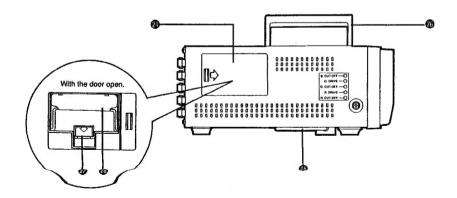
CONTROLS, LOCATIONS, FUNCTIONS

Front

■Rear



■Side



■Front

OCONTRAST control

Light Strong

Turn to adjust the picture contrast.

BRIGHT control

Dark Bright

Turn to adjust the picture brightness.

3 CHROMA control

Thin Dense

Turn to adjust the colour density of the picture.

OPHASE control

Reddish (Greenish

Turn to adjust the picture hue. Adjust with reference to skin colour. (This control only operates when NTSC signals are input to the unit.)

OVOLUME control

Decrease (tncrease

Turn to adjust the audio level of the connected earphone or built-in speaker.

GEARPHONE lack

To connect an optional earphone. No sound is heard from the built-in speaker when in use.

POWER indicator

Lights green when the power is ON. If the power is supplied from the inner battery, it changes from green to red, indicating when the duration of the inner battery becomes almost empty. If it turns red, charge the inner battery or replace it with another one.

Notes:

- When using the DC IN 12 V terminal, if the indicator changes from green to red, defining that the input voltage has decreased. If using an outer battery, replace it with a charged one.
- Be sure to turn the power OFF before replacing the battery.

3 POWER button

Press to turn the power ON/OFF.

- (.m.): The power is OFF; the POWER indicator is turned off.
- (): The power is ON; the POWER indicator is turned on.

PAL/NTSC button

Press to switch the colour system (PAL/NTSC), according to the input signal.

- (...): When a PAL signal is input.
- (): When an NTSC signal is input.

®SYNC button

Press to select the external sync operation. When performing the external sync operation, input a sync signal to the rear EXT SYNC terminal.

- (_): When operating the unit using the sync signal of the input video signal. (Normally set to this position.)
- (): When operating the unit using an external sync signal.

OCCLOR OFF button

Press to obtain monochrome pictures. Use to check white balance, etc.

- (...): Normal colour pictures.
-): Monochrome pictures.

WUNDERSCAN button

Press to change the scanning mode between overscanning and underscanning.

- (...): Overscanning.
- (): Underscanning.

® INPUT button

Press to select the video and audio signals input to the INPUT A or INPUT B terminal.

- (.....): When selecting the video and audio signals of the component connected to the INPUT A.
- (): When selecting the video and audio signals of the component connected to the INPUT B.

MBATTERY CHARGE Indicator

When setting the BATTERY CHARGE switch on the rear of the unit to "CHARGE", it lights. While the inner battery is being charged, it lights red. The indicator turns green when charging is complete.

BATTERY SAVE Indicator

When the BATTERY SAVE switch is ON, the indicator lights green. Once in operation, it turns red.

■ Rear

BATTERY SAVE switch

When ON, the unit continues to operate as long as a video signal is input. When no video signal is input, the unit's power turns OFF, except for the operation of the detection circuit. This function can also be used for extending the battery's lifetime.

Note:

This function has no effect on the AC power supply.

MBATTERY CHARGE switch

Switch to select between inner battery charging or unit operation.

CHARGE: For inner battery charging. MONITOR: For unit operation.

Note:

This function has no effect on any power source via the DC IN 12 V terminal.

(B) AC IN terminal

Connect the provided power cord.

PDC IN 12 V terminal

Connect to a DC 12 V power source (batteries, etc.).

Caution: When power is supplied through the AC IN terminal, it cannot be supplied through the DC IN 12 V terminal at the same time, and the inner/outer battery power is automatically turned off.

@EXT SYNC terminals

IN and OUT terminals of the external sync signal. (Bridged connection is possible.)

Termination switch

75 Ω: When connecting (inputting) to the iN terminal only.

OPEN: For a bridged connection.

@INPUT B terminals

IN and OUT terminals of the video and audio signals. (Bridged connection is possible.)

Termination switch

75 Ω : When connecting (inputting) to the IN terminal only.

OPEN: For a bridged connection.

@INPUT A terminals

IN and OUT terminals of the video and audio signals. (Bridged connection is possible.)

Termination switch

75 Ω: When connecting (inputting) to the IN terminal only.

OPEN: For a bridged connection.

@Installation holes for an outer battery

If a battery other than the inner one is required, install the battery adapter.

Moto.

The installation holes are M4 in diameter, 12 mm in depth; the distance between the two holes is 60 mm.

■Slde

@Inner battery compartment door

Open to install and remove the exclusive inner battery.

Tilt lever

Set this lever to tilt the unit by approximately 15°. Cautions:

- Do NOT put weight on the unit with the tilt lever set.
- . Do NOT carry the unit by holding the tilt lever.

@Carrying handle

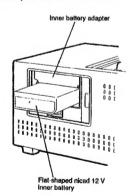
Lift up the handle to carry the unit.

BATTERY EJECT button

Push down the button as indicated to eject the inner battery.

@inner battery adapter

Use with a flat-shaped nicad 12 V inner battery. Contact your local dealer for details.



PHOMIDING POWER SUPPLY TO THE UNIT

This unit operates with any of the following three types of power source: domestic AC outlets, inner batteries, or outer batteries. By connecting the power cord to one of the power input terminals, the unit automatically selects that power source. Be careful that this selection must be under the following conditions:

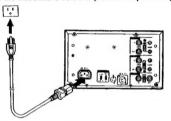
Power source priority table

	Correct connection		
When using the following power source	AC IN terminal	DC IN 12 V terminal *Yes/No	
AC outlet	Yes		
Outer battery	No	Yes	
Inner battery	No	No	

^{*} Even if the DC IN 12 V terminal is connected, AC IN has priority.

■Using an AC Outlet

Follow the instructions below to provide the power supply to the unit from a domestic AC outlet.



- 1. Set the BATTERY CHARGE switch to "MONITOR".
- Connect the provided power cord to the AC IN terminal, then connect the power plug to an AC outlet.

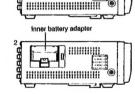
■Using an Inner Battery

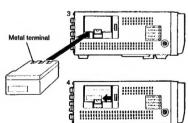
This unit operates with either of the two types of inner battery: JVC NB-G1U or flat-shaped nicad 12 V inner battery. To provide the power supply from an inner battery, it should be charged in advance by installing it in the unit. The batteries' usage duration is approx. 40 minutes.

Note:

When providing the power supply to the unit from the inner battery, do not connect the AC IN or DC IN 12 V

terminal.





◆ Installing and removing the inner battery

- Slide the battery compartment door in the direction of the arrow to open it.
- Pull the inner battery adapter inside the battery compartment door towards you to remove it.
- When using a flat-shaped nicad 12 V Inner battery, do not remove the battery adapter.
- Install the inner battery with the metal terminal section facing upwards. Insert the battery until it is securely locked (click is heard).

IMPORTANT: Be careful NOT to forcefully install the inner battery with the metal terminals facing downwards as it cannot be removed.

Close the door.

When removing the inner battery, open the door and push down the BATTERY EJECT button. The battery is released, and then it can be removed.

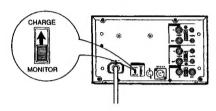
BATTERY EJECT bullon

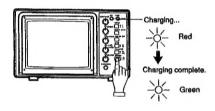
IMPORTANT:

To avoid the inner battery from hitting your finger, while pressing the BATTERY EJECT button, support the battery with your other hand.

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Charging the inner battery

- 1. Install the inner battery in the unit.
- 2. Connect the provided power cord to the AC IN
- 3. Set the BATTERY CHARGE switch to "CHARGE".
- 4. Set the POWER button to ON.

The BATTERY CHARGE indicator lights to indicate when the unit begins charging.

The BATTERY CHARGE Indicator changes from red to green, indicating that charging is complete.

After charging is complete, set the POWER button to OFF and set the BATTERY CHARGE switch to "MONITOR".

CAUTIONS:

Regarding the inner battery

- The unit completes charging in approx. 15 hours. To avoid the inner battery from overcharging, reset the POWER button to OFF as soon as the BATTERY CHARGE indicator turns green.
- · Be careful not to short-circuit the battery terminal by touching it with metal objects; it could be dangerous and damage the inner battery.
- Keep the terminals clean. If they become dirty, wipe with a cloth.
- Do NOT throw the inner battery into a fire or leave it in places with a hot temperature.

Battery attributes

- · Even if a charged battery is left unused, its power will gradually discharge.
- · Rechargeable batteries have a certain lifespan. (They cannot be used permanently.)
- •If the battery is repeatedly charged without discharging the power, the battery lifetime may become shorter.
- Though a battery becomes warm during and just after charging, it is not a malfunction.

Allowable temperatures

In charge : +10°C to +35°C In storage: -10°C to +30°C

After a rechargeable battery has been stored and left unused for a long period of time, the recharging capacity may become less. However, repeated use

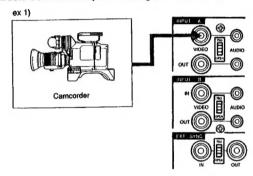
will gradually restore this condition.

CONNECTING TO EXTERNAL EQUIPMENT

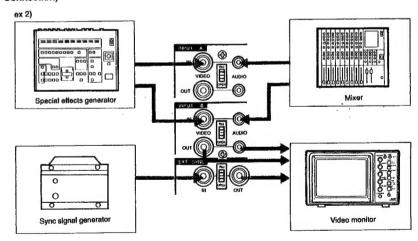
Notes:

- Be sure to disconnect the power plug from the power source before connecting to other equipment.
- Refer to the instruction manuals of the equipment to be connected.
- When using any of the OUT connectors (bridged output), set their termination switches to "OPEN".

■ Basic Connections (When Using as a Monitor for ENG/EFP)



■ Systematic Connections (When Performing Editing with an External Sync and Bridged Connection)



TM-600PN-E

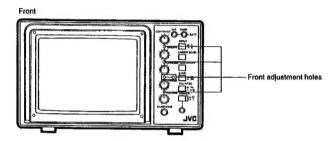
FOR SERVICE PERSONNEL.

There are switches and controls for service personnel on and inside the right and left side panels of the unit. Do NOT adjust them except in cases when adjustment is specially required.

WARNINGS:

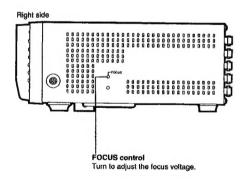
- The user must NEVER touch inside the unit because it is dangerous.
- Use an insulated screwdriver for adjustments.

■ Front Adjustment Holes (CONTRAST/BRIGHT/CHROMA/PHASE Subcontrols)

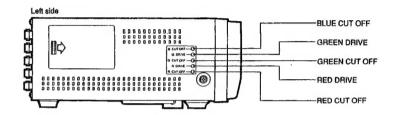


CAUTION: There are two CHROMA adjustment holes; the left one is for NTSC signals and right for PAL signals.

■ Right-Side Adjustment Hole (FOCUS Control)



■ Left-Side Adjustment Holes (CUT OFF/DRIVE Controls)



CUT OFF controls

Turn to adjust the white balance of low-luminance signals.

DRIVE controls

Turn to adjust the white balance of high-luminance signals.

Note:

Use an adjustment screwdriver to turn the screws in the adjustment holes. Turn left to decrease and turn right to increase.

The NORMAL/SERVICE switch required to adjust the CUT OFF controls of the white balance is inside the unit.
 Remove the top cover of the unit and set the switch to "SERVICE" if necessary.

Removing the top cover



Remove the screw from each side of the unit as shown.

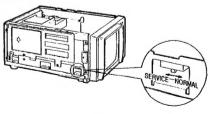


2. Remove the four screws from the rear of the unit.



 Remove the top cover by sliding it backwards, then lifting it up.

Set the NORMAL/SERVICE switch

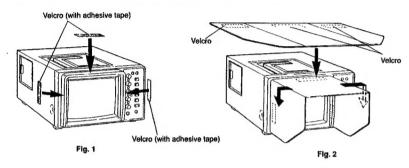


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INSTALLING THE SCREEN HOOD

The provided screen hood is useful to make the monitor screen easier to view when the unit is used in bright places, such as outdoors. Install the screen hood by wrapping it around the screen frame using the velcro and adhesive tapes. After installation, the screen hood can be detached and attached as required.



♦ installation

- Using a cloth, clean the surfaces of the screen frame shown with the arrows, so that the adhesive tapes can be securely attached. (See Fig. 1.)
- After removing the protective covers from the adhesive sides of the three pleces of velcro, attach each piece of velcro to the three sections on the screen frame, shown with the arrows. (See Fig. 1.)
- 3. Install the screen hood by wrapping it around the screen frame, as shown. (See Fig. 2.)

Note:

Do not attempt to remove the already attached tapes from the screen frame of the unit because it could result in discoloration of the screen frame.

INSTALLING THE REAR GUARDS

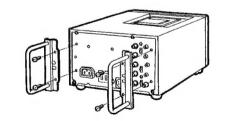
The rear terminals and connection cables can be protected by installing the provided Rear Guards. Install them if necessary.

Installing the Rear Guards:

Install the two Rear Guards to the rear panel using the provided four screws, as shown.

CAUTION

With the Rear Guards Installed, do NOT stand the unit vertically (with the screen facing upwards). This could cause the unit to accidentally fall down.



BEFORE CALLING FOR SERVICE

• Check the following items once more:

Problems	Points to be checked	Measures
No power supply.	If a domestic AC power outlet is used, check the provided cable is properly connected to the unit and AC socket.	If the power cable is disconnected, reconnect it.
	If a battery is used, check the battery is charged. Note: When a plug is connected to the DC IN 12 V terminal, the inner battery is not operative	if the battery is not charged, recharge it.
	If the power is supplied via the DC IN 12 V terminal, check that the power cable is properly connected. (If using an outer battery, check that it is charged.)	If the cable is disconnected, reconnect it. If the battery is not charged, recharge it.
No (or blurred) pictures.	Check whether or not the input is correctly selected.	If it is incorrectly selected, press the INPUT button until normal pictures are obtained.
	Check whether or not the BATTERY CHARGE switch is set to "CHARGE".	If it is set to "CHARGE", reset to "MONITOR".
	Check whether or not the rear video terminals are correctly connected.	If they are disconnected, reconnect them.
	Check whether or not the BRIGHT control is correctly adjusted.	If it is incorrectly adjusted, readjust the picture brightness.
	Check whether or not the external output components operate normally.	If they operate abnormally, repair them.
Abnormal pictures or wrong colours.	Check whether or not there is something which generates a magnetic field (motor, speaker, transformer, magnet, etc.) near the monitor.	If there is anything of this kind, move the units apart.
No sound.	Check the audio level control.	If it is incorrectly adjusted, readjust it to its appropriate level.
	Check whether or not the earphone is connected to the earphone jack.	If it is connected, disconnect the earphone plug.
	Check whether or not the rear audio input terminals are correctly connected.	If they are disconnected, reconnect them.

Colour system

: Colour video monitor : NTSC/PAL system

CRT

: 15-cm (measured diagonally), 90° deflection, in-line gun, vertical pitch stripe phosphor of 0.42 mm

Audio output Speaker

: 0.5 W 8 \O 10 % THD : 8-cm round x 1

Screen size (H x V)

: 113 x 84 mm Scanning frequency: NTSC (H) 15.734 kHz,

(V) 59.94 Hz

PAL (H) 15.625 kHz, (V) 50 Hz Horizontal resolution: More than 250 lines

Power requirements: AC 100 to 240 V, 50/60 Hz;

DC 12 V

Input A, B

Power consumption : AC Max. 0.57 A; DC 2.7 A

: Video - BNC 1 V p-p, 75 ohms, negative sync

Bridged connection is possible (A termination switch is provided) Audio - RCA pin connector 390 mV rms, high Impedance Bridged connection is possible

EXT sync

: BNC

4 V p-p, 75 ohms, negative sync Bridged connection is possible (A termination switch is provided)

: 4.9 kg

Welght

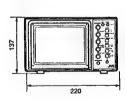
Accessory

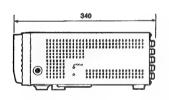
: Power cord (approx. 2.0 m) x 1

Screen hood x 1 Rear Guard (1 set) Inner battery adapter x 1 (already installed in the inner battery compartment)

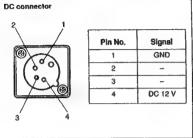
Design and specifications subject to change without notice.

Dimensions (Unit: mm)





Pin Assignment



-14-

~ 15 -

MAIN PARTS LOCATION

■ Circuit board arrangement

The circuit boards and modules are composed as follows.

DEF PB ASS'Y(FX-2017A)

[Atop DEF PB assembly]

● SIGNAL PB ASS'Y(FX-1044A)

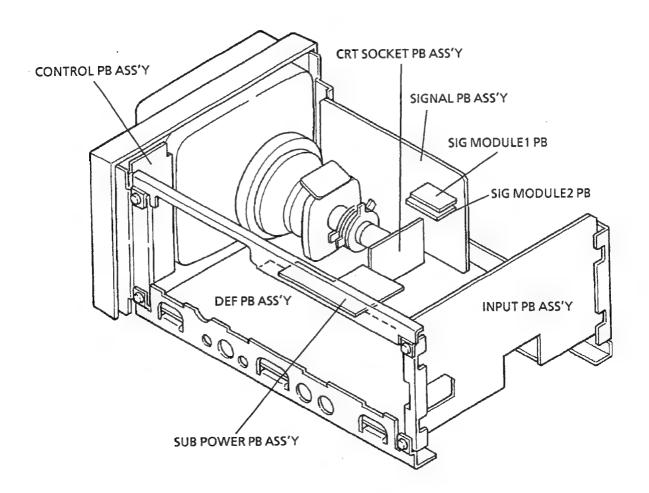
[Atop Signal PB assembly]

- O SIG MODULE1 PB(FX-M001A)
- O SIG MODULEZ PB(FX-M002A)
- CONTROL PB ASS'Y(FX-4021A)
- CRT SOCKET PB ASS'Y(FX-3022A)
- INPUT PB ASS'Y(FX-6029A)
- SUB POWER PB ASS'Y(FX-9032A)

Total: 6 boards, 2 modules

■ Factory settings

Contrast	Detent position
INPUT	Α
UNDER SCAN	NORMAL
COLOR OFF	OFF
SYNC	INT
PAL/NTSC	NTSC
POWER	OFF
CONTRAST	Detent position
BRIGHT	"
CHROMA	/
PHASE	"
VOLUME	Mechanical center
BATT.CHARGE SW	MONITOR
BATT.SAVE SW	OFF
Termination SW	75Ω



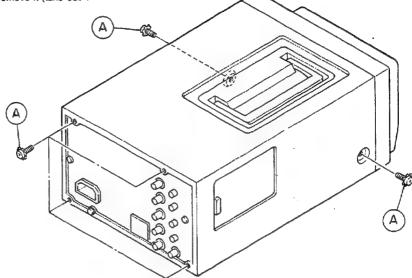
SPECIFIC SERVICE INSTRUCTIONS

■ External parts removal

Top cover

1. Take out 6 screws (A) and remove the top cover.

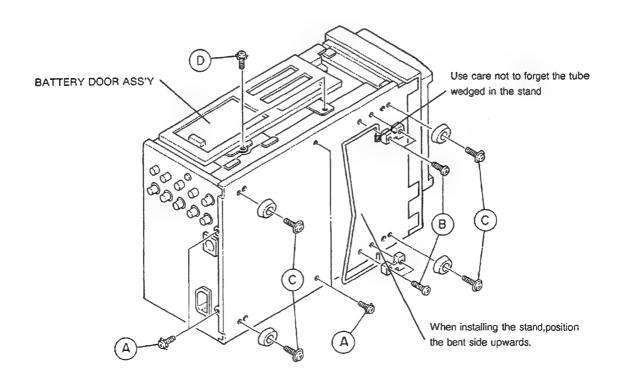
If the Rear guard is affixed, first remove it (take out 4 screws).



Bottom cover

- 1. Remove the top cover.
- 3. Take out 4 screws @ and remove the feet.
- Take out 2 screws

 and remove the battery door assembly.



Rear bracket

- 1. Remove the top cover.
- 2. Take out 2 screws (a) and 1 screw (b). Remove the top beam (left side).
- Take out 2 screws © and 2 screws ®.Remove the top beam (right side).
- 4. Take out 1 screw (2) and remove the PCB guard.
- 5. Take out 2 screws (1) and remove the battery box.
- 6. Remove the bottom cover.
- 7. Take out 4 screws @ and remove the rear bracket.

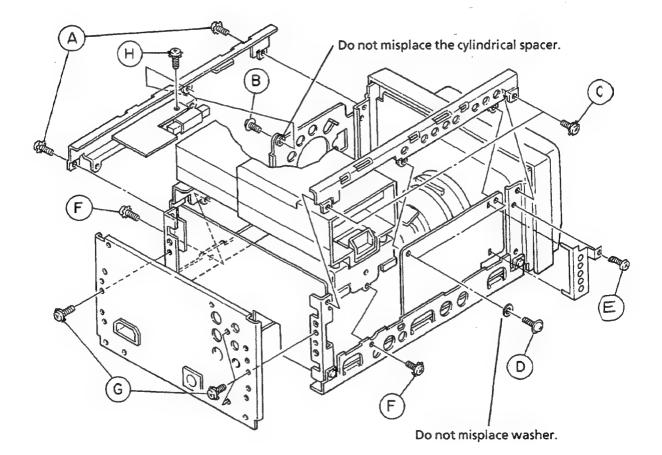
Sub-power PB assembly

- 1. Remove the top cover.
- Take out 1 screw

 Remove the resistor and subpower PB assembly.

Signal PB assembly

- 2. The Signal PB assembly can then be removed.



●Input PB assembly

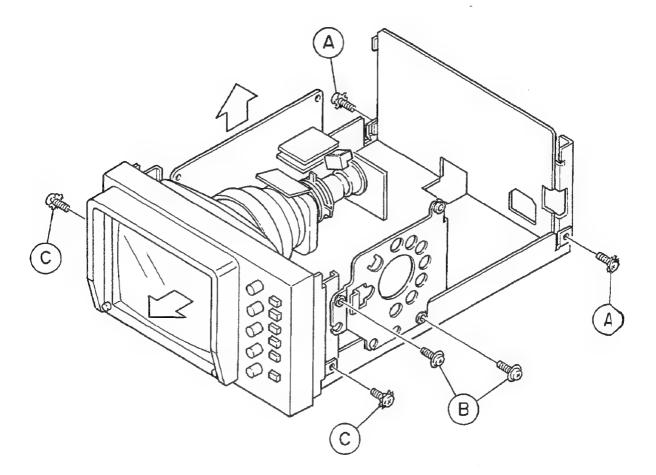
- 1. Remove the top cover, bottom cover and rear bracket.
- Take out 2 screws
 and remove the input PB assembly.

Speaker

- 1. Remove the top cover and top beams.
- 2. Take out 2 screws (B) and remove the speaker together with the speaker bracket.
- When installing, use care not to damage the speaker cone.

Front Panel

- 1. Remove the top cover, bottom cover and top beams.
- 2. Take out 2 screws © and remove the front panel.

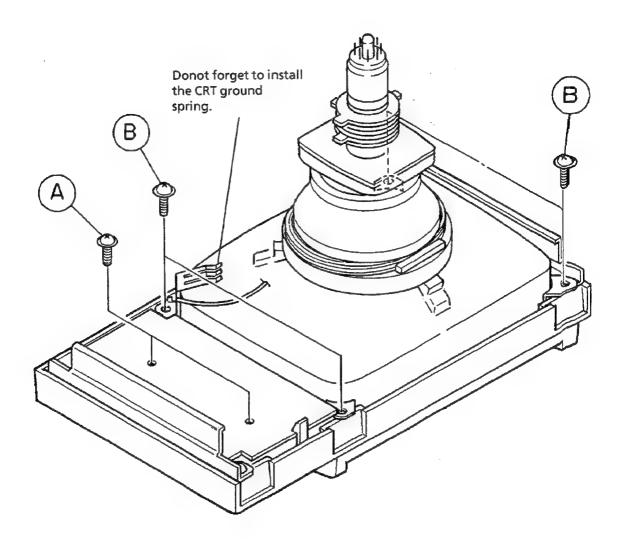


● Control PB assembly

- 1. Remove the front panel and front bracket.
- 2. Take out 2 screws (A) and remove the control PB assembly.

CRT

- 1. Remove the front panel and front bracket.
- 2. Take out 4 screws ® and remove the CRT.
- Be cautious of picture inclination when installing the CRT.



SERVICE ADJUSTMENT

■ Preparation

- Supply power and allow the set and test instruments to warm up and stabilize for at least 30 minutes before proceeding with adjustments.
- 2. Check that the power source is the correct AC voltage.
- Use care not to disturb controls and switches other than those indicated in the adjustment procedure.
- 4. Set controls and switches used by the customer (brightness, tint, hue, vertical hold, etc.) to their factory positions (refer to the list of these settings).

■ Test equipment list

- DC voltmeter (digital voltmeter)
- Oscilloscope
- Signal generator (NTSC/PAL systems)
 Color bar (NTSC/PAL)

Split color bar (NTSC)

Crosshatch (NTSC)

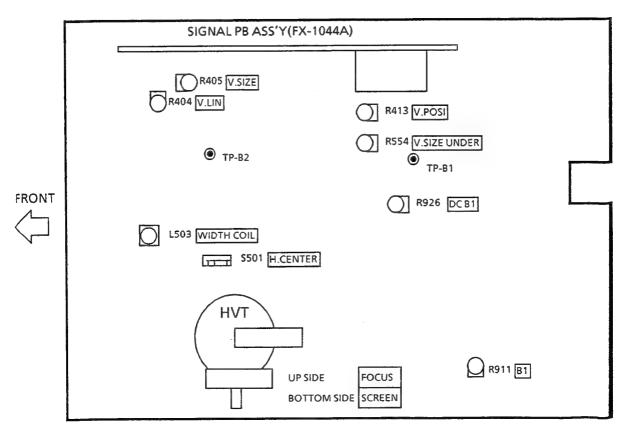
White (NTSC)

Black (NTSC)

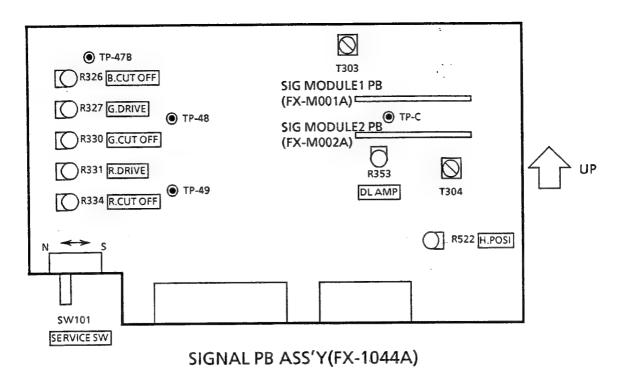
Mono scope(NTSC)(if available)

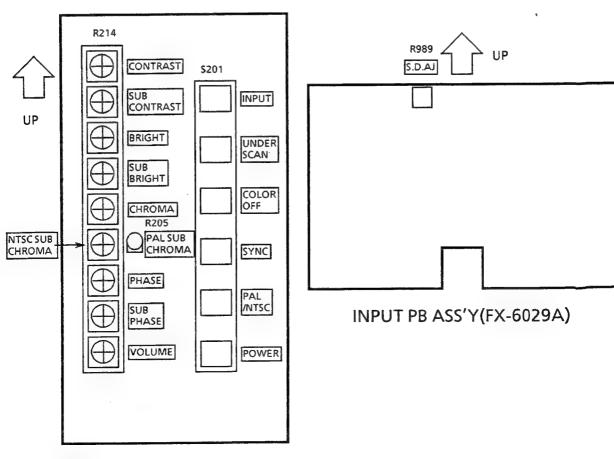
- Standard test pattern (NTSC)
- 12 V stabilized power supply(more than 3A)

■ Adjustment locations



DEF PB ASS'Y(FX-2017A)





■ Adjustment procedure

Signal PB assembly (FX-1044A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	PAL APC	Color bar signal (PAL) Oscilloscope	TP-48 TP-49	T304 R353(DL AMP)	 Supply a color bar signal input. Connect channel 1 of a dual-trace oscilloscope to TP-48 and channel 2 to TP-49.Set for XY coordinate mode. Connect a 5.6KΩ resistor between IC101 pins 29 and 31. Short both ends of C316. Adjust T304 and R353 (DL AMP) to obtain the waveform shown in Fig.B.
2.	Burst cleaning coil	Color bar signal (PAL) Oscilloscope	TP-C	T303	Supply a color bar signal input. Connect oscilloscope TP-C Adjust T303 for minimum output waveform amplitude.

● DEF PB assembly (FX-2017A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	B1 voltage (AC)	Crosshatch (NTSC) Digital voltmeter	TP-B1	BRIGHT VR SUB BRIGHT VR [CONTROL PB ASS'Y] R911(B1)	 Supply a crosshatch signal input. Set the Bright and Sub Bright VRs to off positions. Adjust R911 (B1) for 25 V ± 0.1 V at TP-B1. Confirm near absence of voltage fluctuation even when the input signal is changed. Return the Bright and Sub Bright VRs to their previous positions.
2.	B1 voltage (DC)	Crosshatch (NTSC) Digital voltmeter 12 V stabilized power supply (more than 3A)	TP-B1	BRIGHT VR SUB BRIGHT VR [CONTROL PB ASS'Y] R926(DC B1)	 Supply a crosshatch signal input. Set the Bright and Sub Bright VRs to off positions. Adjust R926 (DC B1) for 25 V ± 0.1 V at TPB1. Confirm near absence of voltage fluctuation eve n when the input signal is changed. Return the Bright and Sub Bright VRs to their previous positions.

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Contrast standard setting	color bar (NTSC) Oscilloscope	TP-47B [SIGNAL PB ASS'Y]	SUB CONTRAST VR	 Supply a split color bar signal input. Set the Contrast and Bright VRs to their detent positions. Connect oscilloscope to TP-47B. Adjust the Sub Contrast VR to obtain 30 Vp-p from the black to the 100 % white waveform components.
2.	Sub chroma and sub phase	Color bar (NTSC/PAL) Oscilloscope	TP-47B [SIGNAL PB ASS'Y]	NTSC SUB CHROMA VR SUB PHASE VR R205(PAL SUB CHROMA) PAL/NTSC SWITCH	 Supply a NTSC color bar signal input. Connect oscilloscope to TP-47B. Adjust the Sub Phase VR to align the 2 and 3 waveform levels. Adjust the NTSC Sub Chroma VR to align the 1 and 4 waveform levels. Set the PAL/NTSC switch to PAL. Supply a PAL color bar signal input. Adjust R205 (PAL Sub Chroma) to align the 1 and 4 waveform levels. Set the PAL/NTSC switch to NTSC.
3.	Sub Bright	Full black signal (NTSC)		SUB BRIGHT VR	 Supply a full black signal input. Check that the Contrast and Bright VR; are at their detent positions. Set the Sub Bright VR to just before the position where the picture becomes light (do no: set for excessive brightness).

● DEF PB assembly (FX-2017A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Horizontal gain and centering	Crosshatch (NTSC) (Mono scope)		R522 (H Pos) [SIGNAL PB ASS'Y] L503 (Width Coil) S101 (H Center) Underscan switch [CONTROL PB ASS'Y]	 Supply a crosshatch signal input. Adjust R522 (H Pos) to set the center of the crosshatch to the center of the picture. Set the Underscan switch on and check for picture loss from the raster. If there is loss, adjust S101 (H Center). Set the Underscan switch to off and adjust L503 (Width Coil) for 95 %.
2.	Vertical gain and centering	Crosshatch (NTSC) (Mono scope)		R405 (V Size) R413 (V Pos) R404 (V Lin) R554 (V Size Under) Underscan switch [CONTROL PB ASS'Y]	 Supply a crosshatch signal input. With the Underscan switch off, adjust R405 (V Size) and R413 (V Pos) for 95 %. Adjust R404 (V Lin) so the picture is symmetrical top and bottom. With the Underscan switch on, adjust R554 (V Size Under) for square crosshatch shapes. Operate the Underscan switch on/off and check that adjustment is stable.

● Signal PB assembly (FX-1044A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Low light white balance	Crosshatch signal (NTSC)		S101 (Service switch) R326 (B Cut Off) R330 (G Cut Off) R334 (R Cut Off) SCREEN VR (bottom of HVT)	 Supply a crosshatch signal input. Set the Service switch (S101) to S. Turn R326 (B Cut Off), R330 (G Cut Off) and R334 (R Cut Off) to where color is not obtained. Turn the Screen VR fully counterclockwise. Then slowly turn it clockwise and note the first color obtained. Except for this color, turn the other color CutOff VRs to produce white. Set the Service switch (S101) to N.
2.	Highlight white balance	Full white signal (NTSC)		R331 (R Drive) R327 (G Drive) Contrast VR	Supply a full white signal input. Adjust R331 (R Drive), R327 (G Drive) and Contrast VRs for optimum white color image.

● DEF PB assembly (FX-2017A)

No.	ltem	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	Focus	Crosshatch signal (NTSC)		Focus VR (top of HVT)	Supply a crosshatch signal input. Turn the Focus VR to the position for optimum crosshatch focus and absence of moire.

● INPUT PB assembly (FX-6029A)

No.	Item	Test equipment	Test points	Adjustment locations	Adjustment procedure
1.	shut off voltage	Crosshatch (NTSC) Digital voltmeter 12 V stabilized power supply (more than 3A)		R989(S.D.AJ)	 Supply a crosshatch signal input. Turn R989(S.D.AJ) fully counter-clockwise. Connect a digital voltmeter and stabilized power supply to the battery case + and - terminals. Set the stabilized power supply for 10.6V. Turn R989(S.D.AJ) and stop at the point the picture disappears. Slightly raise the power supply voltage. Cut off,then resupply power. Confirm startup.

PARTS LIST

CAUTION

- The parts marked ⚠ are very important for the safety. When replacing these parts, be sure to use specified ones to secure the safety and performance.
- The module circuit board is supplied together with the assembly, but the parts which do not have the drawing in this Parts List, P. W. Board Ass'y and the Parts No. columns of which are filled with lines ——. will not be supplied.
- As a rule, the resistors and capacitors which are indicated as shown in (NOTE 2) "HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS" are not shown in the list of the parts on the board.

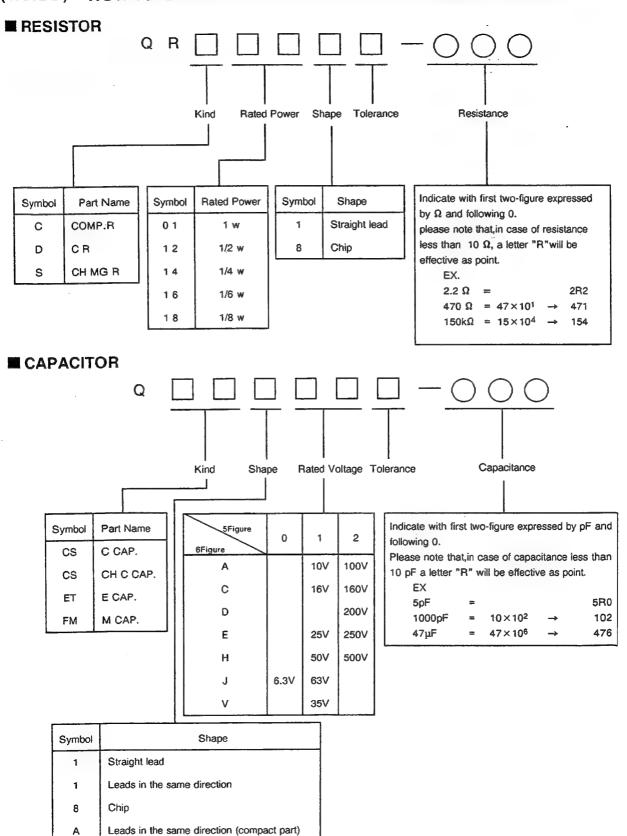
 When ordering the service parts, confirm the resistance/rated power, capacitance/rated voltage, and type of the parts, then order by the part No. indicated according to (NOTE 2).

(NOTE 1) ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

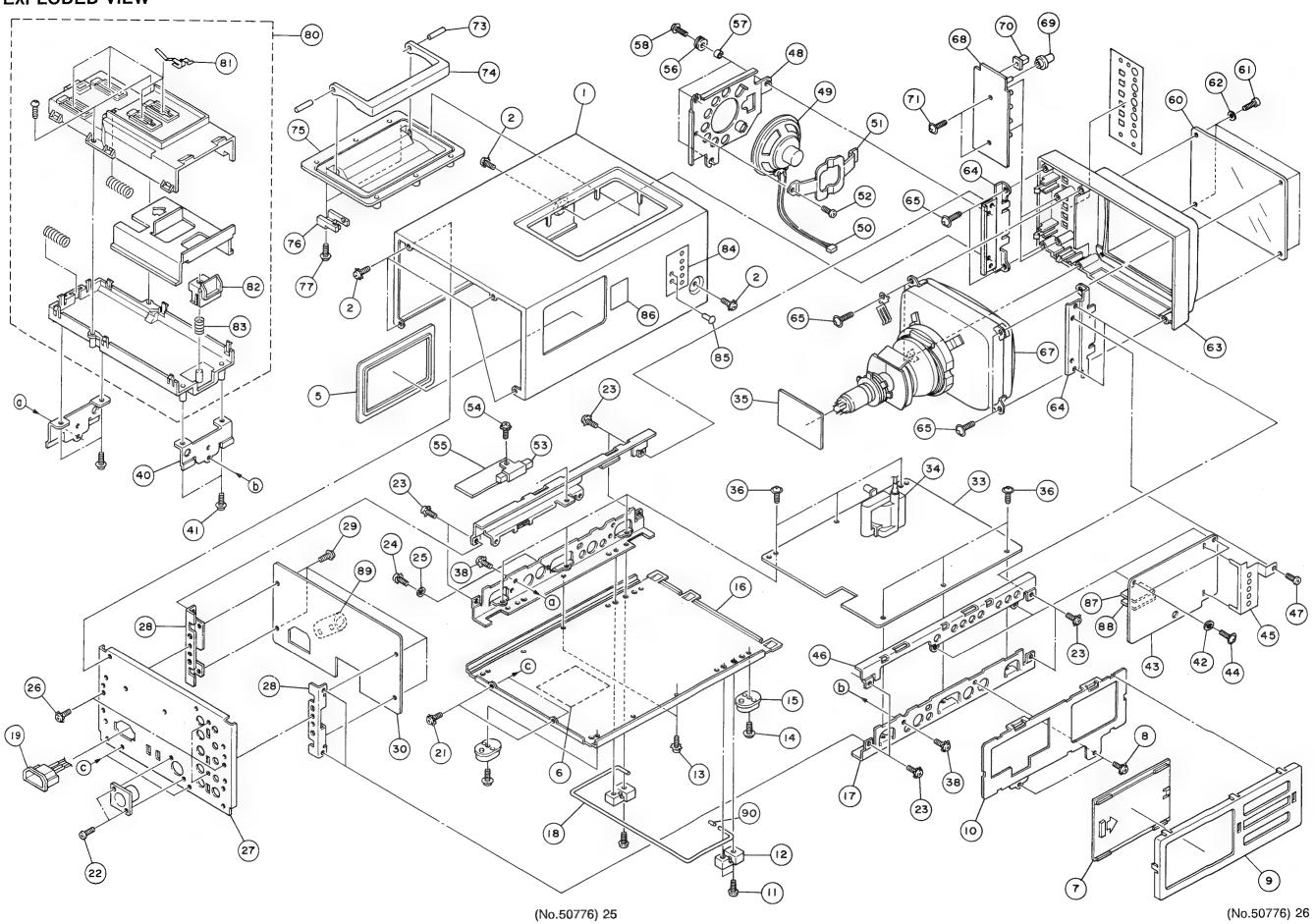
	RESISTORS		CAPACITORS
CR	Carbon Resistor	C CAP.	Ceramic Capacitor
FR	Fusible Resistor	E CAP.	Electrolytic Capacitor
PR	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MFR	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic (apacitor

	TOLERANCES								
F	G	J	к	М	N	R	Н	Z	Р
± 1%	± 2%	±5%	± 10%	± 20%	±30%	+30%	+50%	+80%	+110% - 0%

(NOTE 2) HOW TO EXPRESS PARTS NUMBERS OF STANDARD PARTS



EXPLODED VIEW



EXPLODED VIEW PARTS LIST

<u> </u>	Ref.No.	Part No.	Part Name	Description	Local
⅓	1	CM12393-002	TOP COVER		
	2	CM44286-00F	ASSY SCREW	×6	
	5	CM35817-001	DOOR PANEL		
	5	CM35785-001(R)	ROLL R LABEL		
	7	CM35734-A01	BATTERY DOOR		
	8	CM44286-00A	ASSY SCREW	×2	
	9	CM22629-001	DOOR COVER		
	10	CM35673-001	DOOR BASE		
	11	SPST4012M	SCREW	× 4	
	12	CM47719-A01	STAND HOLDER		
	13	CM44286-00F	ASSY SCREW	× 2	
	14	GPST4010M	W TAP SCREW	× 4	
	15	CM45764-002	FOOT	× 4	
⚠	16	CM12392-002	BOTTOM COVER		
	17 18	CM35670-A01 CM35671-001	BOTTOM BEAM STAND HOLDER	× 2	
Δ.					
Δ	19 21	QMCB004-001 CM44286-00F	BAC INLET ASSY SCREW	× 2	
	22	SPST2606N	TH. TAP. SCREW	×2	
	23	CM44286-00A	ASSY SCREW	×2	
	24	CM44287-00B	ASSY SCREW	F 5 W	
	25	CM46603-001	T.LOCK WASHER		
	26	CM44286-00F	ASSY SCREW	× 4	
	27	CM22692-002B	REAR BKT ASSY		
	28	CM47718-001	REAR CONNECT BKT	×8	
	29	GBSG3008Z	TAPPING SCREW	× 4	
	30		INPUT PWB ASSY	FX-6029A	
	33		DEF PWB ASSY	FX-2017A	
\triangle	34	CE42334-001	H.V.TRANSF.	T902	
-	35		CRT SOCKET PWB	FX-3022A	
	36	GBSG3008Z	TAPPING SCREW	× 6	
	38	CM44286-00A	ASSY SCREW	×2	
	40	CM47723-001	BATTERY BKT	× 2	
	41	GBSF3010Z	TAPPING SCREW	× 4	
	42	CM40574-011	WASHER		
Λ	43		SIGNAL PWB ASSY	FX-1044A	
	44	GBSG3008Z	TAPPING SCREW	×2	
	45	CM47897-001	PCB GUARD		
	46	CM35672-A01	TOP BEAM	×2	
	47	GBSG3008Z	TAPPING SCREW		
	48	CM35844-001	SP BKT		
	49	77-52	SPEAKER		
	50	CHGS0003-0E-G	SPEAKER WIRE ASSY		
	51	CM43388-001	SPEAKER HOLDER		
	52	SDST3006Z	SCREW		
	53	QRF108K-270	UNF R	27 Ω 10W	K
	54	CM44286-00A	ASSY SCREW		
<u>1</u>	55		SUB POWER PWB	FX-9032A	
	56	CM47873-001	RUBBER BUSH	×3	
	57	CM47900-001	SPACAER	×3	
	58	GPST3008Z	W TH. TAP SCREW	× 3	
	60	CM47840-001	PROTECT PANEL		
	61	BYS3010M	BOLT	× 4	
	62	Q03093-826	WASHER	× 4	
	63	CM12395-00A-M0	FRONT PANEL ASSY		
	64	CM47724-001	PANEL BKT	×2	
	65	GBSF4012Z	TAP SCREW	×6	
	67	A14JJD68X03	ITC TUBE	V01	
<u> </u>	68		CONTROL PWB ASSY	FX-4021A	
	69	CM47853-001	VOLUME KNOB	× 5	
	70	CM46044-001	PUSH KNOB	×6	
	71	GBSF3010Z	TAPPING SCREW	× 2	
	73 .	CM47847-001	PIN	×2	
<u> </u>	74	CM35749-001	HANDLE		
_	75	CM12420-001			

Δ	Ref.No.	Part No.	Part Name	Description	Local
	76 77	CM40835-001 SBSF3010Z	PIN HOLDER	×2	
Λ	80	CM12394-00A	TAPPING SCREW BATTERY CASE ASSY		
	81	CM47728-001	BATTERY TERMINAL	× 4	
	82	CM35735-A01	EJECT KNOB	2.1	
	83	CM46757-003	SPRING		
	84	CM47898-001	GUARD PLATE		
	85	CM47902-00B	RIVET ASSY	× 2	
Δ	86	CM47872-001	BATTERY CAUTION		
Δ	87	FX-MO01A	SIG MODULE 1		
Δ	88	FX-M002A	SIG MODULE 2		
	89	CE41355-00B	CORE		
	90	CM47915-001	TUBE		

PRINTED WIRING BOARD PARTS LIST SIGNAL PW BOARD ASS'Y(FX-1044A)

Δ	Symbol No.	Part No.	Part Name	Description	Local
	VARIA: R1326 R1327 R1330 R1331 R1334 R1353 R1522	B L E R E S I S T QVPC802-502H QVPC802-201H QVPC802-502H QVPC802-201H QVPC802-502H QVPC611-102HZ QVPC611-503HZ	O R V R V R V R V R V R V R V R	5k Ω B B.CUT OFF 200 Ω B G.DRIVE 5k Ω B G.CUT OFF 200 Ω B R.DRIVE 5k Ω B R.CUT OFF 1k Ω B DL AMP 50k Ω B H.POSI	
	RESIS' R1335-37	T O R QRG019J-123S	OM R	12kΩ 1W J	
	C A P A C C1106 C1312 C1313 C1314 C1315 C1316 C1317 C1502	QEN61HM-474Z QFV71HJ-474MZ QEN61HM-474Z QFV71HJ-104MZ QFV71HJ-334MZ QEN61HM-475Z QFLC1HJ-392MZ QFLC1HJ-332MZ	BP E CAP. TF CAP. BP E CAP. TF CAP. TF CAP. BP E CAP. M CAP.	0.47 μ F 50V M 0.47 μ F 50V J 0.47 μ F 50V M 0.1 μ F 50V J 0.33 μ F 50V J 4.7 μ F 50V M 3900 p F 50V J 3300 p F 50V J	
	C1508 C1509	QFLC1HJ-822MZ QFLC1HJ-103MZ	M CAP. MYLAR CAP.	8200 p F 50V J 0.01 μ F	
	TRANSI T1303 T1304	F O R M E R CELT016-006 CE40396-A01	CLOCK TRANSF. DL P.TRANSF.		
	COIL L1301-03 L1304-06 L1307	CELP026-221Z CELP026-151Z CELP026-8R2Z	PEAKING COIL PEAKING COIL PEAKING COIL	220 µ H 150 µ H 8.2 µ H	
	D I O D E D1109-10 D1303-05 D1501 D1503 DL1101	1SS133-T2 1SS133-T2 RD6.8ES(B2)-T2 RD5.1ES(B3)-T2 CE40714-001	SI.DIODE SI.DIODE ZENER DIODE ZENER DIODE DELAY LINE		
	T R A N S 1 Q1103 Q1105 Q1302 Q1303-05 Q1401 Q1501	I S T O R 2SA933S(QR)-T 2SC1740S(QR)-T DTC144WS-T 2SC3187-T DTC144WS-T DTC144WS-T	SI.TRANSISTOR SI.TRANSISTOR DIDI.TRANSISTOR SI.TRANSISTOR DIDI.TRANSISTOR DIDI.TRANSISTOR		
	I C IC1101	M51413ASP	I.C(MONO-ANA)		
	OTHERS DL1301 SW1101 X1301 X1302 X1501	CE41305-001 QSS1F22-C09 CE41092-00A CE41115-001 CSB500F9	DELAY LINE(1H) SLIDE SWITCH CRYSTAL CRYSTAL CER.RESONATOR	SERVICE SW	

DEF PW BOARD ASS'Y(FX-2017A)

⚠ Symbol No.	Part No.	Part Name	Description	Local
VARIAB R2404 R2405 R2413 R2554 R2911 R2926	LE RESIS QVPC611-102HZ QVPC611-102HZ QVPC611-203HZ QVPC611-502HZ QVPC623-102HZ QVPC611-102HZ	TOR VR VR VR VR VR VR VR TRIM R	$\begin{array}{cccc} 1k\Omega & B & V.LIN \\ 1k\Omega & B & V.SIZE \\ 20k\Omega & B & V.POSI \\ 5k\Omega & B & V.SIZE & UNDER \\ 1k\Omega & B & B1 \\ 1k\Omega & B & DC & B1 \\ \end{array}$	• • •
RESIST R1605 R2406 R2410 R2414 R2532 R2534 R2535 R2539	OR QRG029J-330A QRD123J-4R7SX QRG02CJ-121AX QRD123J-121SX QRG029J-101A QRG029J-121 QRD123J-391SX QRG029J-221A	OM R C R OM R C R OM R OM R C R	33 Ω 2W J 4.7 Ω 1/2W J 120 Ω 2W J 120 Ω 1/2W J 100 Ω 2W J 120 Ω 2W J 390 Ω 1/2W J 220 Ω 2W J	
↑ R2544 ↑ R2545 ↑ R2546 R2553 ↑ R2556 R2901 R2902 R2903	QRZ0054-2R2M QRZ0054-2R2M QRZ0054-2R2M QRG029J-102A QRZ0054-2R2M QRC121K-105Z QRD123J-152SX QRF074K-3R9	FR FR FR OM R FR COMP.R CR UNFR	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	- -
R2904 R2908 R2909 R2912 R2913 R2916 R2943	QRZ0069-472 QRG039J-473A QRM055K-R22 QRD123J-392SX QRD123J-222SX QRD123J-330SX QRG02CJ-152AX	UNF R OM R MP R C R C R C R C R OM R	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
C A P A C C1604-05 ↑ C1607 C2408 C2409 C2411 C2520 ↑ C2521 C2522	I T O R QFV71HJ-104MZ QCF31HP-222AZ QEHC1HM-107MZ QFLC1HJ-103MZ QEHC0JM-108MZ QFLC1HJ-472MZ QFP42JJ-682M QFP32GJ-563M	TF CAP. CH C CAP. E CAP. M CAP. E CAP. M CAP. PP CAP. PP CAP.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
C2523 C2525 C2526 C2527 C2528 C2529 C2530 C2531	QEHC1HM-105MZ QEHC2CM-106MZ QEHC2CM-336MZ QFLC1HJ-224MZ QFK62AJ-105M QEHC1HM-106MZ QEHC1HM-226MZ QEM51CM-108M	E CAP. E CAP. M CAP. MM CAP. E CAP. E CAP. E CAP.	1 µ F 50V M 10 µ F 160V M 33 µ F 160V M 0.22 µ F 50V J 1 µ F 100V J 10 µ F 50V M 22 µ F 50V M 1000 µ F 16V M	
C2532 C2534 C2610 ⚠ C2901 ⚠ C2902 ⚠ C2903 ⚠ C2904 ⚠ C2905	QFK52AJ-475M QFLC1HJ-392MZ QFLC1HJ-103MZ QCZ9033-472A QCZ9058-222MZ QCZ9058-102MZ QCZ9058-222MZ QCZ9058-222MZ QFZ9036-224M	MM CAP. M CAP. M CAP. C CAP. C CAP. C CAP. C CAP. MF CAP.	4.7 µ F 100V J 3900 p F 50V J 0.01 µ F 50V J 4700 p FAC400V M 2200 p F 1000 p F 2200 p F 0.22 µ FAC250V M	
△ C2906 C2907 C2910 C2911 C2912 C2915 C2916 C2918 C2920	QFZ9036-224M QEZ0084-227M QEHC1EM-227MZ QEHC1HM-227MZ QEHC1VM-108MZ QEHC1VM-108MZ QFLC1HK-222MZ QFLC1HK-152MZ QFLC1HJ-104MZ	MF CAP. E CAP. E CAP. E CAP. E CAP. E CAP. M CAP. M CAP. M CAP.	$\begin{array}{ccccccc} 0.22~\mu~FAC250V & M \\ 220~\mu~F & 400V & M \\ 220~\mu~F & 25V & M \\ 220~\mu~F & 50V & M \\ 1000~\mu~F & 35V & M \\ 1000~\mu~F & 35V & M \\ 2200~p~F & 50V & K \\ 1500~p~F & 50V & K \\ 0.1~\mu~F & 50V & J \\ \end{array}$	

∆ Symbol No.	Part No.	Part Name	Description	Local
C A P A C I C2921 C2923 C2925 C2928 C2929 A C2930 C2931 C2932	T O R QEN61HM-475Z QFLC1HJ-683MZ QFLC1HJ-224MZ QEHC1VM-477MZ QFLC1HJ-104MZ QCZ9033-472A QEHC1VM-108MZ QFV71HJ-104MZ	BP E CAP. M CAP. E CAP. M CAP. C CAP. C CAP. E CAP. TF CAP.	4.7 µ F 50V M 0.068 µ F 50V J 0.22 µ F 50V J 470 µ F 35V M 0.1 µ F 50V J 4700 p FAC400V K 1000 µ F 35V M 0.1 µ F 50V J	
C2933 C2950 C2951 C2952	QFLC1HJ-222MZ QEHB1VM-108M QEHC1CM-108MZ QFLC1HJ-224MZ	M CAP. E CAP. E CAP. M CAP.	2200 p F 50V J 1000 µ F 35V M 1000 µ F 16V M 0.22 µ F 50V J	
T R A N S F	ORMER A76568-MA CE42394-001 CE42332-001	H.DRIVE TRANSF. SIDE PIN TRANS SWITCH.TRANSF.		
C O I L L2502 L2503 L2504 L2505 L2901 L2902 L2903	CELC047-300 CE41197-00E CELL008-001 CJ30030-056 CE30001-420 CELC039-181 CE40037-1R0	CHOKE COIL WIDTH COIL LINIARITY COIL HEATER CHOKE HEATER CHOKE CHOKE COIL CHOKE COIL	30 µ H 42 µ H 180 µ H	
D I O D E D2401-02 D2505-10 D2511 D2512 D2513 D2514 D2515 D2516-17	1SR35-400A-HJ 1SR124-400A-HJ 1N4003-T3 1SR35-400A-HJ 1N4003-T2 1SS133-T2 1SR124-400A-HJ 1SS133-T2	SI.DIODE SI.DIODE SI.DIODE SI.DIODE SI.DIODE SI.DIODE SI.DIODE SI.DIODE		
D2519 D2520 D2901 D2902 D2903-04 D2905 D2906 D2907	RD11ES(B3)-T2 1SS133-T2 LB-156-C1 RD13ES(B3)-T2 1SS81-T5 RG2A-LFB1 EG1Z-T3 FML-G12S	ZENER DIODE SI.DIODE BRIDGE DIODE ZENER DIODE SI.DIODE SI.DIODE SI.DIODE SI.DIODE SI.DIODE		
D2908-09 D2910 D2911 D2912 D2913 D2914 D2915-16 D2917	1SS133-T2 RD20ES(B3)-T2 1SS133-T2 RD6.2ES(B2)-T2 RD20ES(B3)-T2 1SS81-T5 1SS133-T2 FMB-24L	SI.DIODE ZENER DIODE SI.DIODE ZENER DIODE ZENER DIODE SI.DIODE SI.DIODE SI.DIODE SHOTKEY DIODE		
D2918 D2919 D2920	RD8.2ES(B2)-T2 RD16E(B3)-T2 EG1Z	ZENER DIODE ZENER DIODE SI.DIODE		
TRANSI Q2501 Q2502 Q2503 Q2504 Q2505 Q2506 Q2901 Q2902 Q2903-04	S T O R 2SC1627A(Y)-T 2SC4478-YA 2SK1895-YA 2SC1472K(AB) 2SC3390(C)-T 2SC2482(C1)-T 2SD1409 2SK1118 2SC1959(Y)-T	SI.TRANSISTOR POWER TRANSISTOR POWER MOS FET SI.TRANSISTOR SI.TRANSISTOR SI.TRANSISTOR SI.TRANSISTOR POWER MOS FET SI.TRANSISTOR	·	

Δ	Symbol No.	Part No.	Part Name	Description	Local
	TRANSI Q2905 Q2906	2SA562TM(Y)-T 2SK1895-YA	SI.TRANSISTOR POWER MOS FET		,
	Q2907 Q2908 Q2909 Q2920	2SC1959(Y)-T 2SC2235(0Y) 2SJ189 2SC3327(AB)-T	SI.TRANSISTOR SI.TRANSISTOR F.E.T. SI TRANSISTOR		
	I C IC2401 IC2601 IC2901 IC2902 IC2903 IC2904	LA7830 AN5265 MB3769AP UPC4559C AN78L05-Y LM2940CT-12	I.C(MONO-ANA) I.C. I.C(MONO-ANA) I.C(MONO-ANA) I.C. I.C(MONO-ANA)		
Δ Δ Δ	OTHERS F2901 LF2901 PC2901 S2501 VA2901	QMF51E2-1R0S CE41094-00A CNY17F-C1 QSL4A13-C03Z ERZ-C10DK621U	FUSE LINE FILTER I.C(PH.COUPLER) LEVER SWITCH ZINC N RESISTOR	1.0A H.CENTER	

CRT SOCKET BOARD ASS'Y(FX-3022A)

	Part No.	Part Name	Description	Local
C A P A C I C3335	T O R QFH63BK-223M	MM CAP.	0.022 μ F 1250V K	
OTHERS	CE40541-00A	CRT SOCKET	•	
Δ	CE40541-001	SOCKET COVER		

CONTROL PW BOARD ASS'Y(FX-4021A)

A	Symbol No.	Part No.	Part Name	Description Local
	VARIAB R4205 R4214	LE RESIST QVAZ010-C003A QVPC611-503HZ	OR VR VR	NTSC SUB CHROMA etc 50kΩ B CONTRAST,BRIGHT etc
	RESIST R4202	O R QRD161J-101Y	CR .	100 Ω 1/6W J
	COIL L4201-02	CELP026-5R6Z	PEAKING COIL	5.6 µ H
	D I O D E D4201-03 D4204-07	SML1216W 1SS133-T2	L.E.D. SI.DIODE	
	TRANSI Q4201-02 Q4203	S T O R DTC124ES-T 2SA562TM(Y)-T	DIGI.TRANSISTOR SI.TRANSISTOR	•
	OTHERS J4201 SW4201	QMS3008-C01 QSTL635-C01	3.5 JACK PUSH SWITCH	INPUT, UNDER SCAN etc

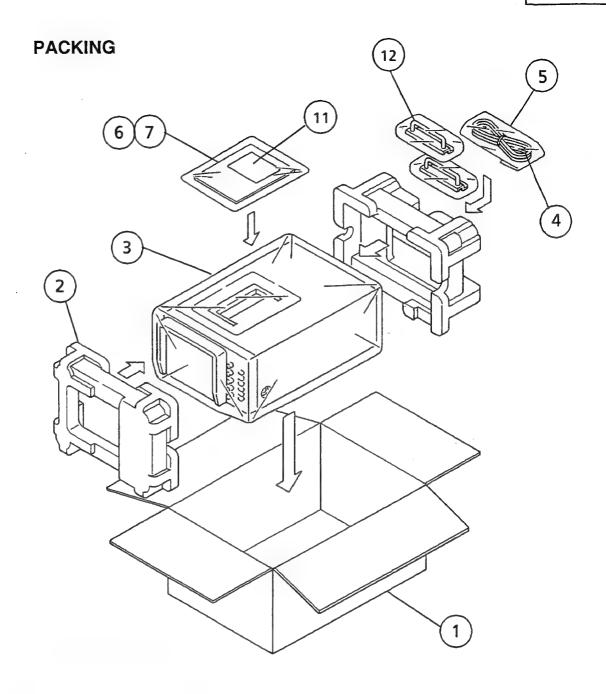
INPUT PW BOARD ASS'Y(FX-6029A)

Symbol No.	Part No.	Part Name	Description	1	Lo	cal
VARIAB R6989	LE RESIST QVPC623-203HZ	O R TRIM RESISTOR	22kΩ B	S.D.A	J	
	_					
					J	
	-		100 µ F	16V	M	
			1 μ F	50V	М	
			0.1 μ F	50V	J	
	-		100 μ F	16V	М	
-	QEKC1HM-105GMZ	E CAP.	1 µ F	50V	М	
C6936	QFV71HJ-104MZ	TF CAP.	0.1 µ F	50V	J	
C6937	QEP61HM-224GMZ	BP E CAP.	0.22 u F	50V	М	
C6938	QEKC1EM-106GMZ	E CAP.				
C6939	QEHC1CM-107MZ	E CAP.	100 μ F		М	
DIODE		1 ** = 10				
D6110-16	1SS133-T2	SI.DIODE				
D6909	1N4003-T3	SI.DIODE				
D6910	RD13ES(B3)~T2	ZENER DIODE				
D6925-28						
	V A R I A B R6989 C A P A C I C6120-22 C6128 C6129 C6612-13 C6618 C66935 C6935 C6936 D I O D E D6110-16 D6909 D6910 D6925-28 D6929-30 D6931	VARIABLE RESIST R6989 QVPC623-203HZ CAPACITOR C6120-22 QEKC1HM-3356MZ C6128 QFV71HJ-104MZ C6129 QEKC1CM-107MZ C6612-13 QEKC1HM-1056MZ C6618 QFV71HJ-104MZ C6619 QEKC1CM-107MZ C6935 QEKC1CM-107MZ C6936 QFV71HJ-104MZ C6937 QEP61HM-224GMZ C6938 QEKC1EM-106GMZ C6939 QEHC1CM-107MZ DIODE D6110-16 1SS133-T2 D6909 1N4003-T3 D6910 RD13ES(B3)-T2 D6925-28 ISS133-T2 D6929-30 RD5.1ES(B3)-T2 D6931 1N4003-T3 D6932-33 1SS133-T2	V A R I A B L E R E S I S T O R R6989 QVPC623-203HZ TRIM RESISTOR C A P A C I T O R C6120-22 QEKC1HM-335GMZ E CAP. C6128 QFV71HJ-104MZ TF CAP. C6129 QEKC1CM-107MZ E CAP. C6612-13 QEKC1HM-105GMZ E CAP. C6618 QFV71HJ-104MZ TF CAP. C6619 QEKC1CM-107MZ E CAP. C6935 QEKC1HM-105GMZ E CAP. C6936 QFV71HJ-104MZ TF CAP. C6937 QEP61HM-224GMZ BP E CAP. C6938 QEKC1EM-106GMZ E CAP. C6939 QEHC1CM-107MZ E CAP. C6939 QEHC1CM-107MZ E CAP. D I O D E D6110-16 1SS133-T2 SI.DIODE D6909 1N4003-T3 SI.DIODE D6925-28 1SS133-T2 ZENER DIODE D6925-28 1SS133-T2 ZENER DIODE D6925-30 RD5.1ES(B3)-T2 ZENER DIODE D6931 1N4003-T3 SI.DIODE D6931 1N4003-T3 SI.DIODE D6931 1N4003-T3 SI.DIODE D6931 1N4003-T3 SI.DIODE	VARIABLE RESISTOR R6989 QVPC623-203HZ TRIM RESISTOR CAPACITOR C6120-22 QEKC1HM-335GMZ E CAP. 3.3 μ F C6128 QFV71HJ-104MZ TF CAP. 0.1 μ F C6129 QEKC1CM-107MZ E CAP. 100 μ F C6612-13 QEKC1HM-105GMZ E CAP. 1 μ F C6618 QFV71HJ-104MZ TF CAP. 0.1 μ F C6619 QEKC1CM-107MZ E CAP. 100 μ F C6935 QEKC1HM-105GMZ E CAP. 1 μ F C6936 QFV71HJ-104MZ TF CAP. 0.1 μ F C6937 QEFC1HM-105GMZ E CAP. 1 μ F C6937 QEFC1HM-224GMZ BP E CAP. 0.1 μ F C6938 QEKC1EM-106GMZ E CAP. 1 μ F C6939 QEHC1CM-107MZ E CAP. 10 μ F C6939 QEHC1CM-107MZ E CAP. 10 μ F DIODE D1 OD E D6110-16 1SS133-T2 SI.DIODE D6925-28 1SS133-T2 ZENER DIODE D6925-28 1SS133-T2 ZENER DIODE D6925-28 1SS133-T2 ZENER DIODE D6931 1N4003-T3 SI.DIODE D6931 1N4003-T3 SI.DIODE D6931 1N4003-T3 SI.DIODE	VARIABLE RESISTOR R6989 QVPC623-203HZ TRIM RESISTOR CAPACITOR C6120-22 QEKC1HM-335GMZ E CAP. 3.3 μ F 50 V C6128 QFV71HJ-104MZ TF CAP. 0.1 μ F 50 V C6129 QEKC1CM-107MZ E CAP. 100 μ F 16 V C6612-13 QEKC1HM-105GMZ E CAP. 1 μ F 50 V C6618 QFV71HJ-104MZ TF CAP. 0.1 μ F 50 V C6619 QEKC1CM-107MZ E CAP. 100 μ F 16 V C6619 QEKC1CM-107MZ E CAP. 100 μ F 16 V C6935 QEKC1HM-105GMZ E CAP. 100 μ F 16 V C6936 QFV71HJ-104MZ TF CAP. 0.1 μ F 50 V C6937 QEP61HM-224GMZ BP E CAP. 0.1 μ F 50 V C6938 QEKC1EM-106GMZ E CAP. 10 μ F 50 V C6939 QEHC1CM-107MZ E CAP. 10 μ F 25 V C6939 QEHC1CM-107MZ E CAP. 10 μ F 25 V C6939 QEHC1CM-107MZ E CAP. 100 μ F 16 V DIODE D6910 RD13ES(B3)-T2 ZENER DIODE D6925-28 ISS133-T2 SI.DIODE D6925-28 ISS133-T2 ZENER DIODE D6931 1N4003-T3 SI.DIODE D6931 1N4003-T3 SI.DIODE D6931 1N4003-T3 SI.DIODE D6932-33 ISS133-T2 ZENER DIODE	V A R I A B L E R E S I S T O R R6989 QVPC623-203HZ TRIM RESISTOR 22k Ω B S.D.AJ C A P A C I T O R C6120-22 QEKC1HM-335GMZ E CAP. 3.3 μ F 50V M C6128 QFV71HJ-104MZ TF CAP. 0.1 μ F 50V J C6129 QEKC1CM-107MZ E CAP. 100 μ F 16V M C6612-13 QEKC1HM-105GMZ E CAP. 1 μ F 50V M C6618 QFV71HJ-104MZ TF CAP. 0.1 μ F 50V J C6619 QEKC1CM-107MZ E CAP. 100 μ F 16V M C6935 QEKC1HM-105GMZ E CAP. 100 μ F 16V M C6936 QFV71HJ-104MZ TF CAP. 100 μ F 16V M C6936 QFV71HJ-104MZ TF CAP. 0.1 μ F 50V J C6937 QEP61HM-224GMZ BP E CAP. 1 μ F 50V J C6938 QEKC1EM-106GMZ E CAP. 0.22 μ F 50V M C6938 QEKC1EM-106GMZ E CAP. 10 μ F 25V M C6939 QEHC1CM-107MZ E CAP. 100 μ F 16V M D I O D E D6110-16 1SS133-T2 SI.DIODE D6909 1N4003-T3 SI.DIODE D6925-28 1SS133-T2 SI.DIODE D6925-30 RD5.1ES(B3)-T2 ZENER DIODE D6931 1N4003-T3 SI.DIODE D6932-33 1SS133-T2 SI.DIODE

Δ	Symbol No.	Part No.	Part Name	Description	Local
	D I O D E D6935-36 D6940 D6941-44 D6946 D6947	1SS133-T2 RD3.6ES(B1)-T2 1SS133-T2 RD12ES(B3)-T2 1SS133-T2	SI.DIODE ZENER DIODE SI.DIODE ZENER DIODE SI.DIODE		
	TRANSI Q2923 Q6104-06 Q6107-08 Q6109-11 Q6601-02 Q6603 Q6908 Q6910 Q6911 Q6912 Q6913 Q6914-15 Q6916-18 Q6920 Q6922	S T O R 2SA562TM(Y)-T 2SC1740S(QR)-T DTC144WS-T 2SC1740S(R)-T DTC144WS-T DTC144WS-T DTC144ES-T 2SJ189 2SC1959(Y)-T 2SA562TM(Y)-T DTC114ES-T 2SA562TM(Y)-T 2SC1959(Y)-T 2SC1959(Y)-T 2SC1959(Y)-T 2SJ189 2SA562TM(Y)-T	SI.TRANSISTOR SI.TRANSISTOR DIDI.TRANSISTOR SI.TRANSISTOR SI.TRANSISTOR DIDI.TRANSISTOR DIGI TRANSISTOR F.E.T. SI.TRANSISTOR SI.TRANSISTOR DIGI.TRANSISTOR SI.TRANSISTOR SI.TRANSISTOR SI.TRANSISTOR SI.TRANSISTOR SI.TRANSISTOR SI.TRANSISTOR SI.TRANSISTOR		
	I C IC6102 IC6602 IC6904 IC6906	TC4066BP TC4066BP UPC358C UPC358C	I.C(DIGI-MOS) I.C(DIGI-MOS) I.C(MONO-ANA) I.C(MONO-ANA)		
Δ	OTHERS F6902 S6101 S6102-03 SW6902 SW6903	QMF51E2-4R0S QSS4C22-C02 QSS4C22-C02 QSS4C22-C02 QSS4C22-C02 QSS4C22-C02	FUSE SLIDE SWITCH SLIDE SWITCH SLIDE SWITCH SLIDE SWITCH	4.0A TERMINATION SW BATTERY CHARGE BATTERY SAVE	

SUB POWER PW BOARD ASS'Y(FX-9032A)

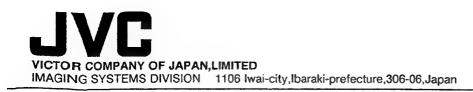
⚠ Symbol No.	Part No.	Part Name	Description	Local
D I O D E D9960-65	RK44-LFJ8	S B DIODE		

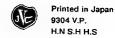


PACKING PARTS LIST

⚠ Ref.No.	Part No.	Part Name PACKING CASE	Description	Local
1				
2	CP11223-A0A	CUSHION ASSY		
3	AP3279-018	POLY COVER		
∧ 4	OMP1110-244K	POWER CORD		
5	OPGA015-03005	POLY BAG		
∆ 6	TM-600PN-E-IBA	INST.BOOK		
7	CM46884-A01	INSTALLATION SEET		
11	CM12499-00A	HOOD ASSY		
12	MS-9915	REAR GUARD SA	×2	







TM-600PN-E STANDARD CIRCUIT DIAGRAM

■NOTE ON USING CIRCUIT DIAGRAMS 1.SAFETY

The components identified by the Asymbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM **VALUES**

The voltage and waveform values have been measured under the following conditions.

(1)Input signal

(2)Setting positions

:PAL Color bar signal

of each knob/button

and variable resistor

:Original setting position

when shipped

(3)Internal resistance of tester

:DC 20kΩ/V

(4)Oscilloscope sweeping time

:H ⇒20µS/div .v ⇒5mS/div

:Others => Sweeping time is

specified

(5) Voltage values

:All DC voltage values

* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOLIEXAMPLE

In the PW board

:R1209-R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

Resistance value

No unit

K :[KΩ]

М $:[M\Omega]$

•Rated allowable power

No indication :1/6[W] Others

:As specified

 $[\Omega]$:

Type

No indication :Carbon resistor

OMR

:Oxide metal film resistor

MFR

MPR

:Metal film resistor

UNFR

:Metal plate resistor

:Uninflammable resisfor

FR

:Fusible resistor

* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

Capacitance value

1 or higher

:[pF]

less than 1 :[µF]

Withstand voltage

No indication :DC50[V]

Others

:DC withstand voltage[V]

AC indicated :AC withstand voltage[V]

* Electrolytic Capacitors

47/50[Example]:Capacitance value[µF]/withstand voltage[V]

Type

No indication: Ceramic capacitor

MY

:Mylar capacitor

MM

:Metalized mylar capacitor

PP

:Polypropylene capacitor

MPP

:Metalized polypropylene capacitor

MF

:Metalized film capacitor

TF

:Thin film capacitor

BP :Bipolar electrolytic capacitor

TAN :Tantalum capacitor

(3)Coils

[µH]:

:As specified

No unit Others

(4)Power Supply

____:12V :25V

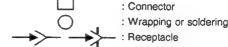
* Respective voltage values are indicated.

(5)Test Point

: Test point

: Only test point display

(6)Connecting method



(7)Ground symbol

: LIVE side ground : NEUTRAL side ground

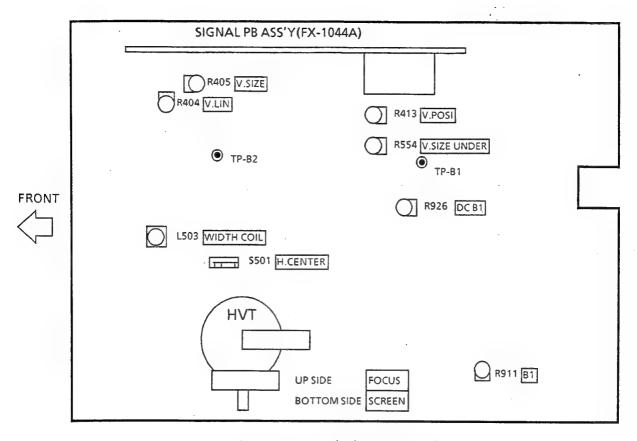
: EARTH ground : DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

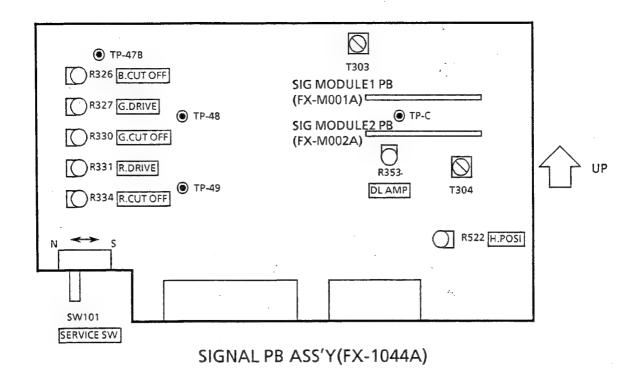
This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE (primary: \bot) side GND and the NEUTRAL (secondary : #) side GND. Therefore, care must be taken for the following points.

- (1) Do not touch the LIVE side GND or the LIVE side GND and the NEUTRAL side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
- (2) Do not short between the LIVE side GND and NEUTRAL side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and NEUTRAL side GND at the same time. If the above precaution is not respected, a fuse or any parts will be broken.
- Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

MAIN PARTS LOCATION ALIGNMENTS LOCATION



DEF PB ASS'Y(FX-2017A)

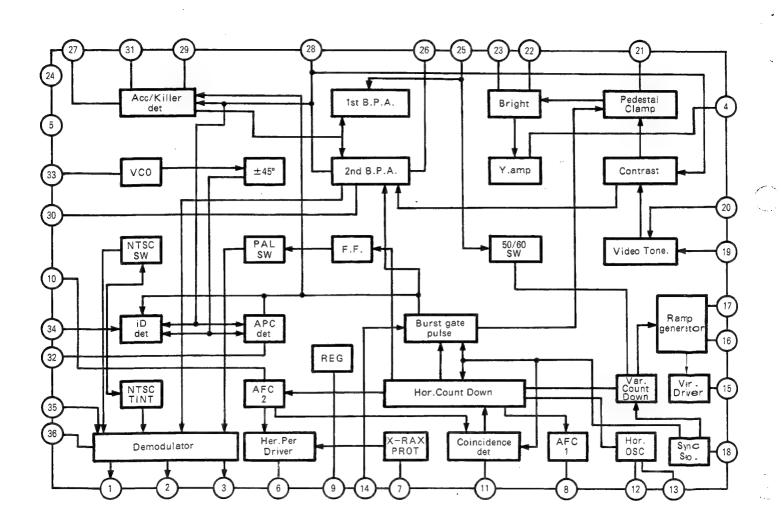


R214 R989 CONTRAST S.D.AJ \$201 SUB CONTRAST INPUT UP BRIGHT UNDER SCAN SUB BRIGHT COLOR OFF CHROMA R205 PAL SUB CHROMA NTSC SUB_ CHROMA SYNC PHASE PAL /NTSC SUB INPUT PB ASS'Y(FX-6029A) PHASE VOLUME POWER

CONTROL PB ASS'Y(FX-4021A)

IC BLOCK DIAGRAM

FX-1044A IC101 M52025SP



JVC

SERVICE MANUAL

COLOUR VIDEO MONITOR

TM-600PN

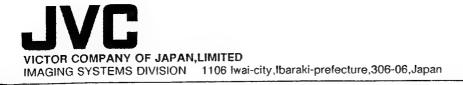
Supplementary

Since some details of the TM-600 service manual (No.50776, Apr. 1993) were incorrect, we are informing you of these errors and of the correct descriptions.

1. CORRECTED ITEMS

PRINTED WIRING BOARD PARTS LIST (Page 32)
DEF PW BOARD ASS'Y(FX-2017A)

\triangle	SYMBOL No.	PARTS No.			
		INCORRECT PARTS No.	CORRECT PARTS No.	PARTS NAME	REMARKS
1	F901	QMF51E2-1R0S	QMF51E2-2R0S	FUSE	2.0A





Prined in Japan 930/ V.P. H.N

JVC

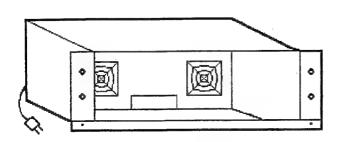
SERVICE MANUAL

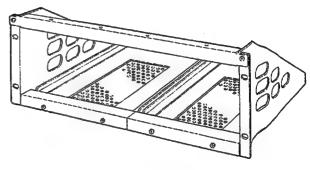
RACK MOUNT ADAPTER

RK-603E/604E

Technician Installed

Sales Promotion Accessories





RK-603E

RK-604E

Rack mount adapters are available as optional sales promotion accessories for the TM-600PN and TMI-550U color video monitors. These enable installing the monitors in an EIA rack.

The main features are as follows.

RK-603E: 3 H size (with cooling fans)

RK-604E: 4 H size

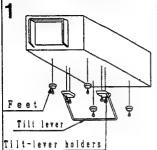
Consult the JVC sales representative regarding these products.

Design & specification subject to change without notice.

INSTALLATION INSTRUCTIONS RK-603E RACK MOUNT ADAPTER

Thank you for purchasing the RK-603E Rack Mount Adapter. This rack mount adapter is designed specifically for the installation of two TM-600PM color video monitors. Before installation, carefully read their instructions.

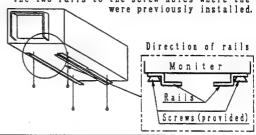
INSTALLATION



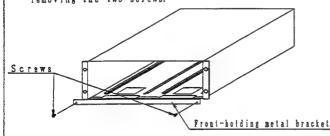
Remove the feet (four pieces). tilt-lever holders (two pieces) and tilt lever (one piece) from the bottom of each monitor by removing their respective SCREWS.

(Removed parts are not asked when installing the monitors to the rack mount adapter. However, you are recommended to store them in a safe place.)

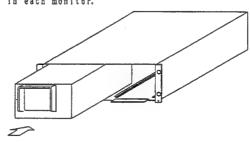
2 Using the provided screws (four pieces), secure the two rails to the screw holes where the feet were previously installed.



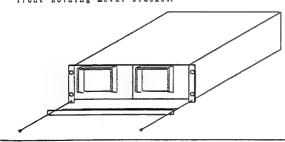
3 Remove the front-holding metal bracket installed on the front of the rack mount adapter shown below, by removing the two screws.



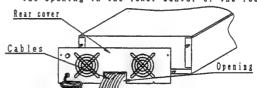
4 Align the rails and the rail guides, then slide in each monitor.



5 After installing the two monitors, reinstall the front-holding metal bracket.



6 Remove the rear cover by loosening the four The rear cover can be slid up and removed after loosening the screws.) Connect the power cord and signal cables etc., to the monitors. Reinstill the rear cover while passing the cables through the opening in the lower center of the rear cover.



CAUTIONS

This rack mount adapter has no power switch.

This rack mount adapter has no power switch. It is to prevent the user from forgetting to switch on the power supply to the fan motors inside the rack mount adapter. Therefore, as long as the power cord of the rack mount adapter is connected to an AC outlet, power is supplied to the fan motors. If it is required to interrupt the power supply of the rack mount adapter, it is necessary to use the power switch provided on the AC outlet side before doing so.

To prevent electric shocks, disconnect the power cord of the rack mount adapter from the AC outlet for installation and removal.

Is the fan working?

Before using the monitors, connect the power cord of the rack mount adapter to an AC outlet. Confirm whether or not the fans inside the rack mount adapter function correctly. If the monitors are used with the fans not working, this could cause malfunction. NEVER insert objects into the fans through their ventilation slots, etc.

SPECIFICATIONS

Type

:Rack mount adapter specifically for color video monitor TM-60) PN (2 units installable)

Power requirement :AC220-240V 50Hz

Power consumption :18 W / 16 W Weight :7kg

:Rail X 4 Accessories

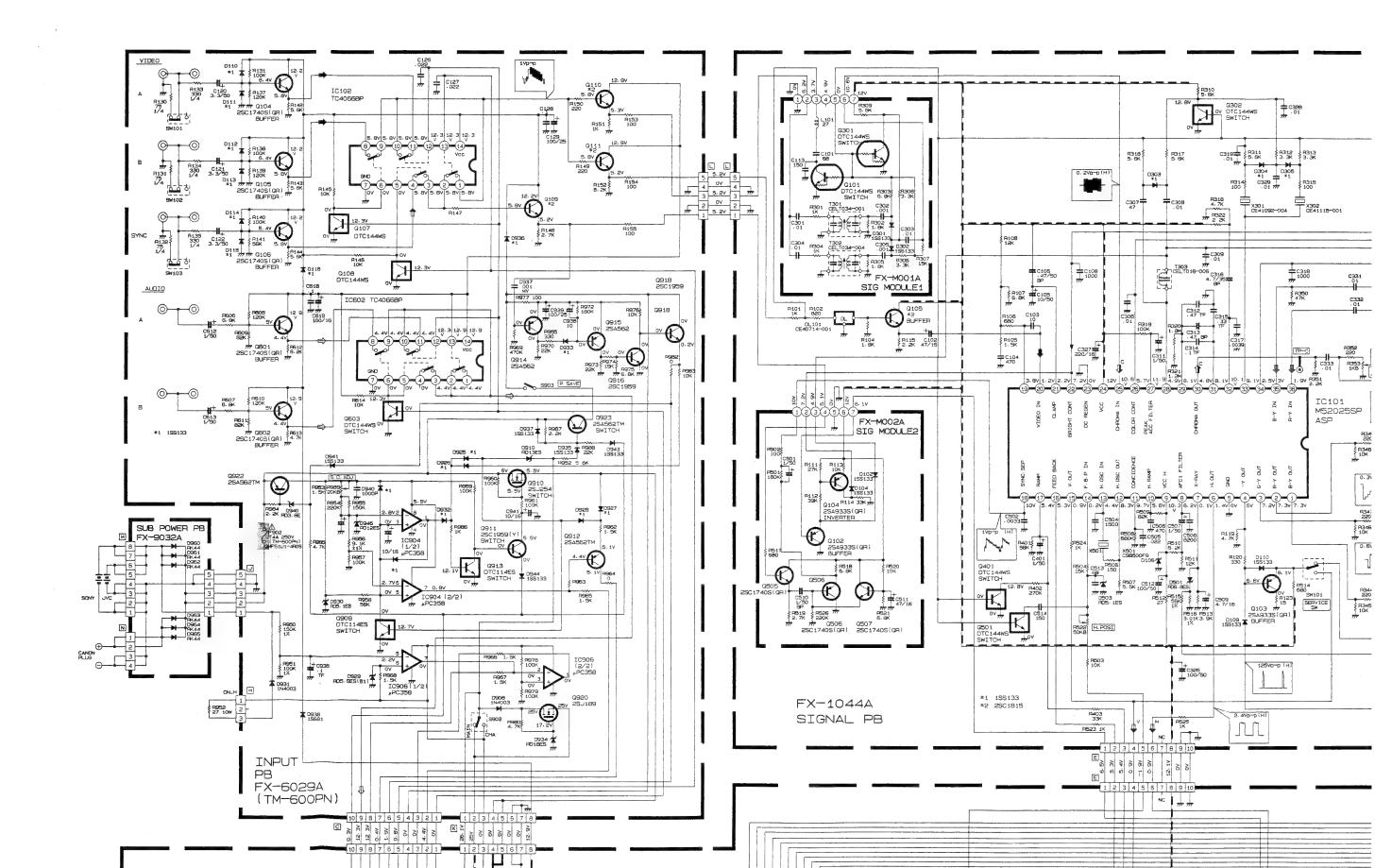
Rail-installing screw (M4 flat screw) X 8 Front-holding metal bracket (installed on the unit) X 1

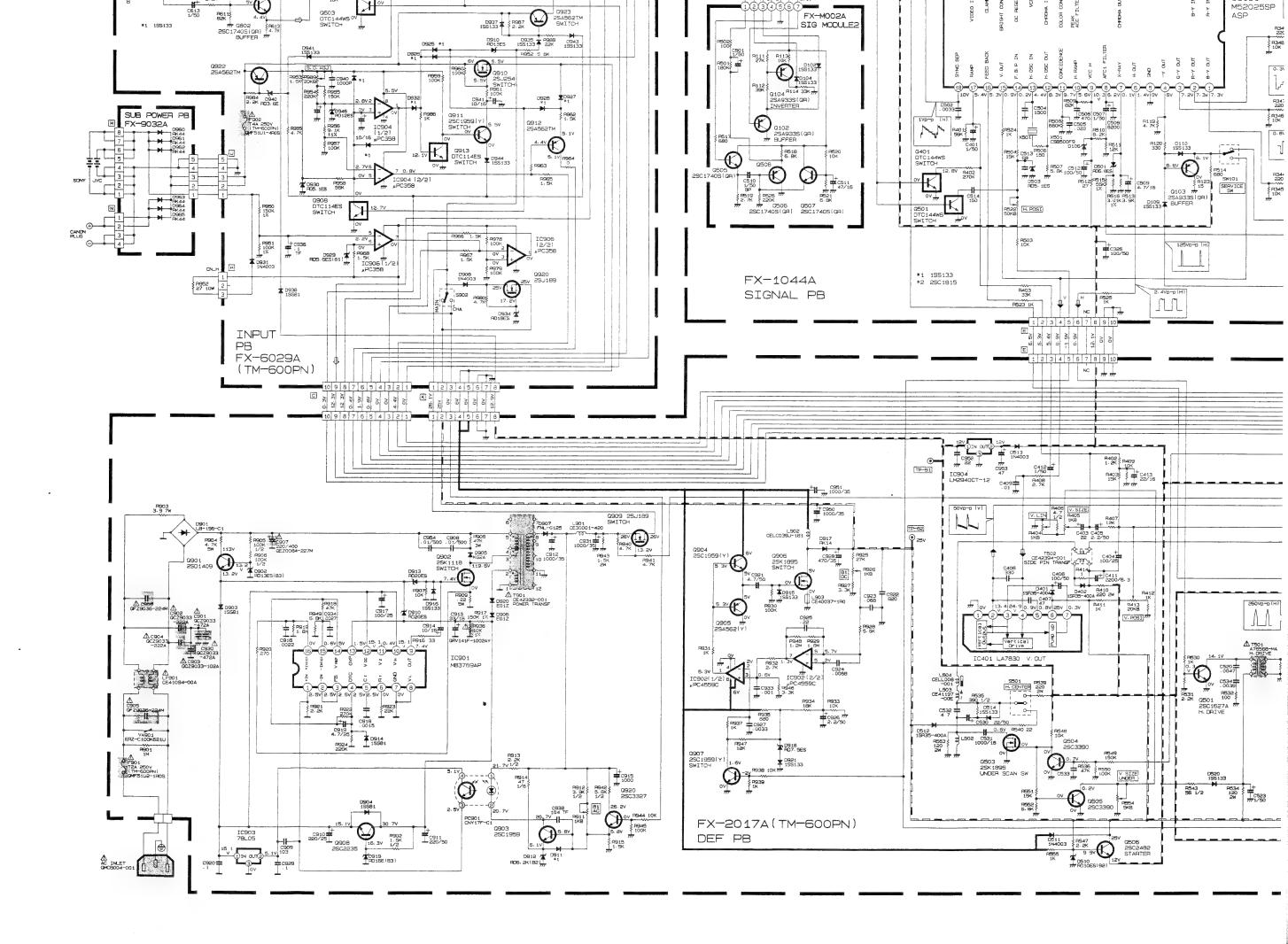
Screw

(Installed on the unit) \times 2



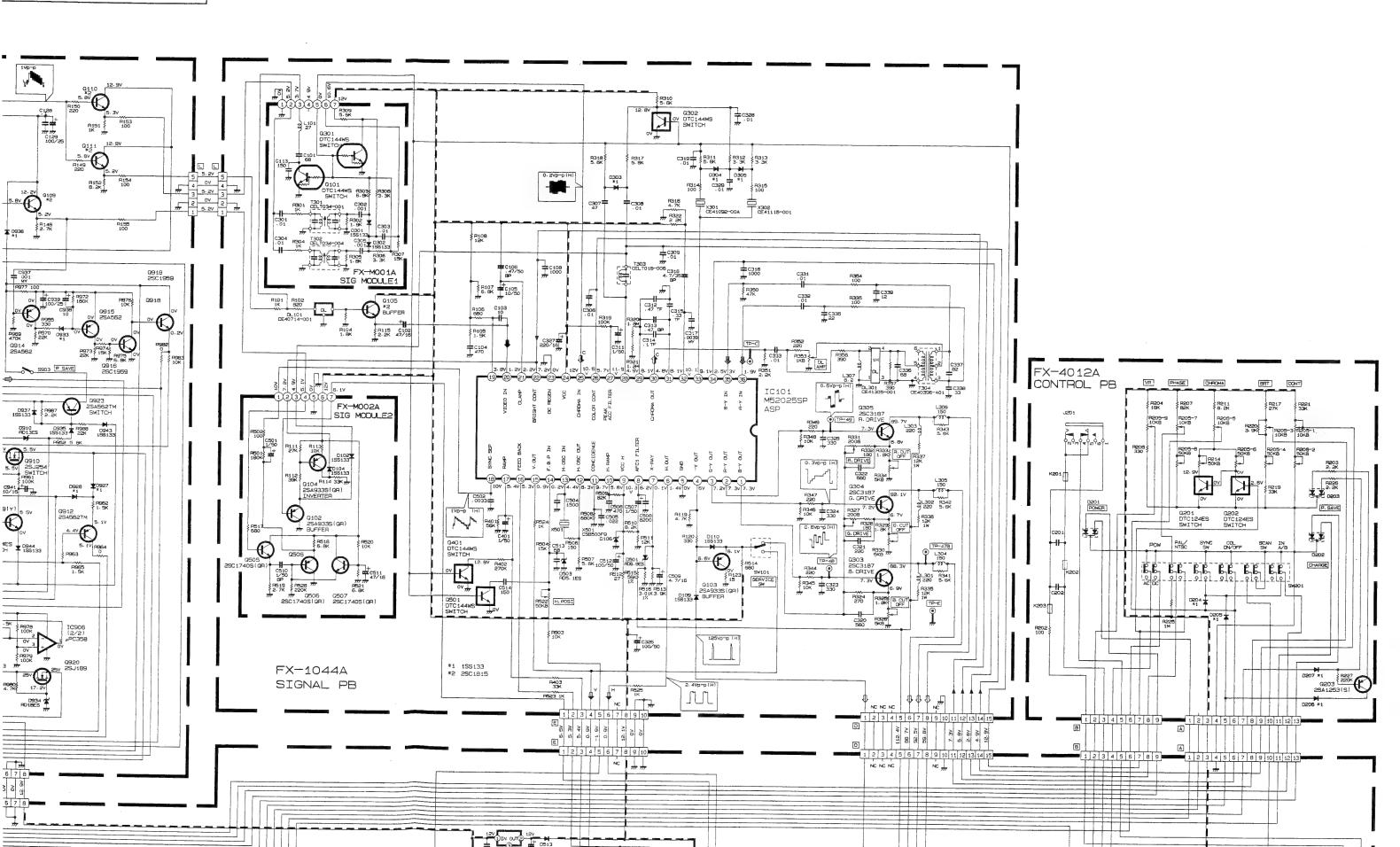
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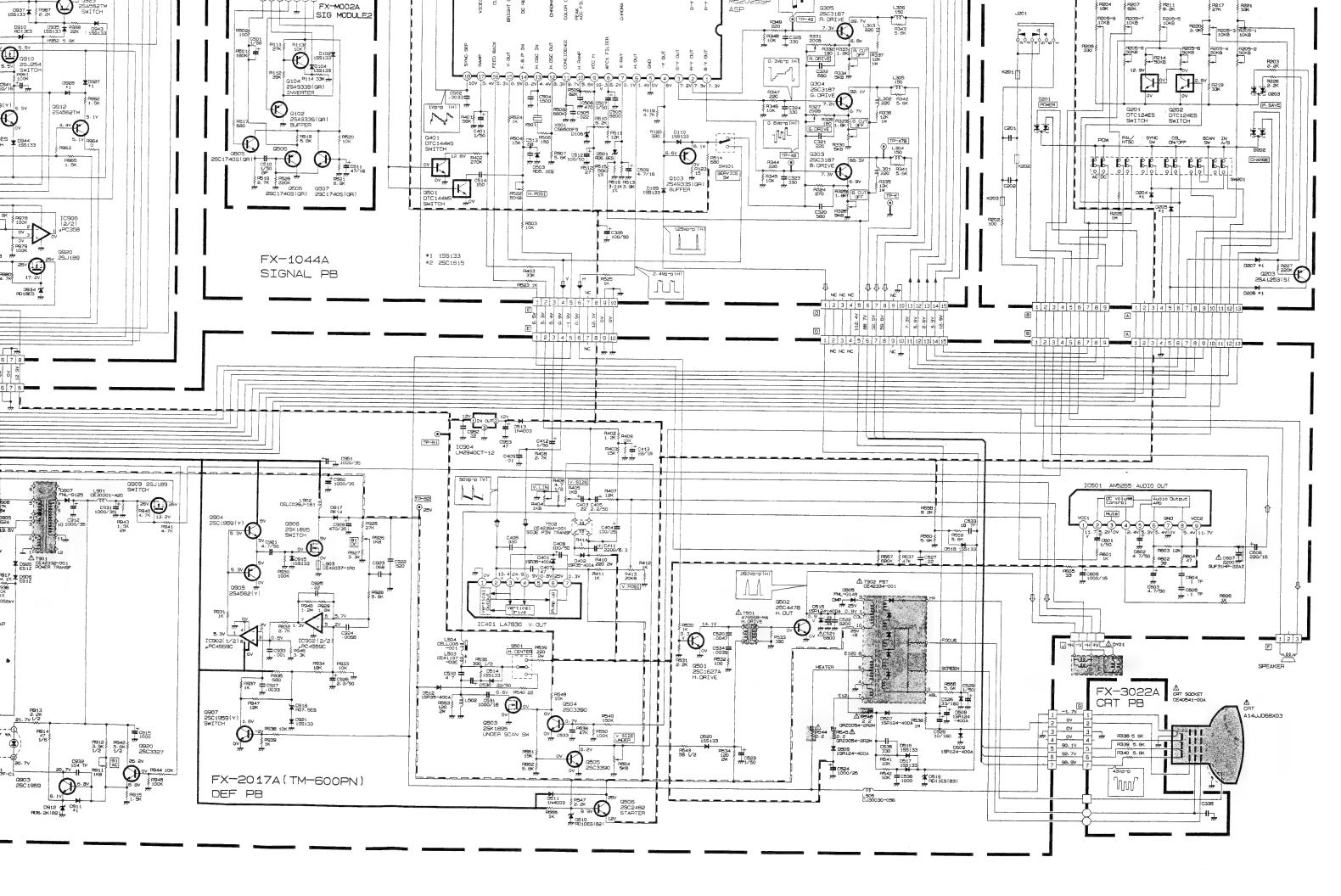






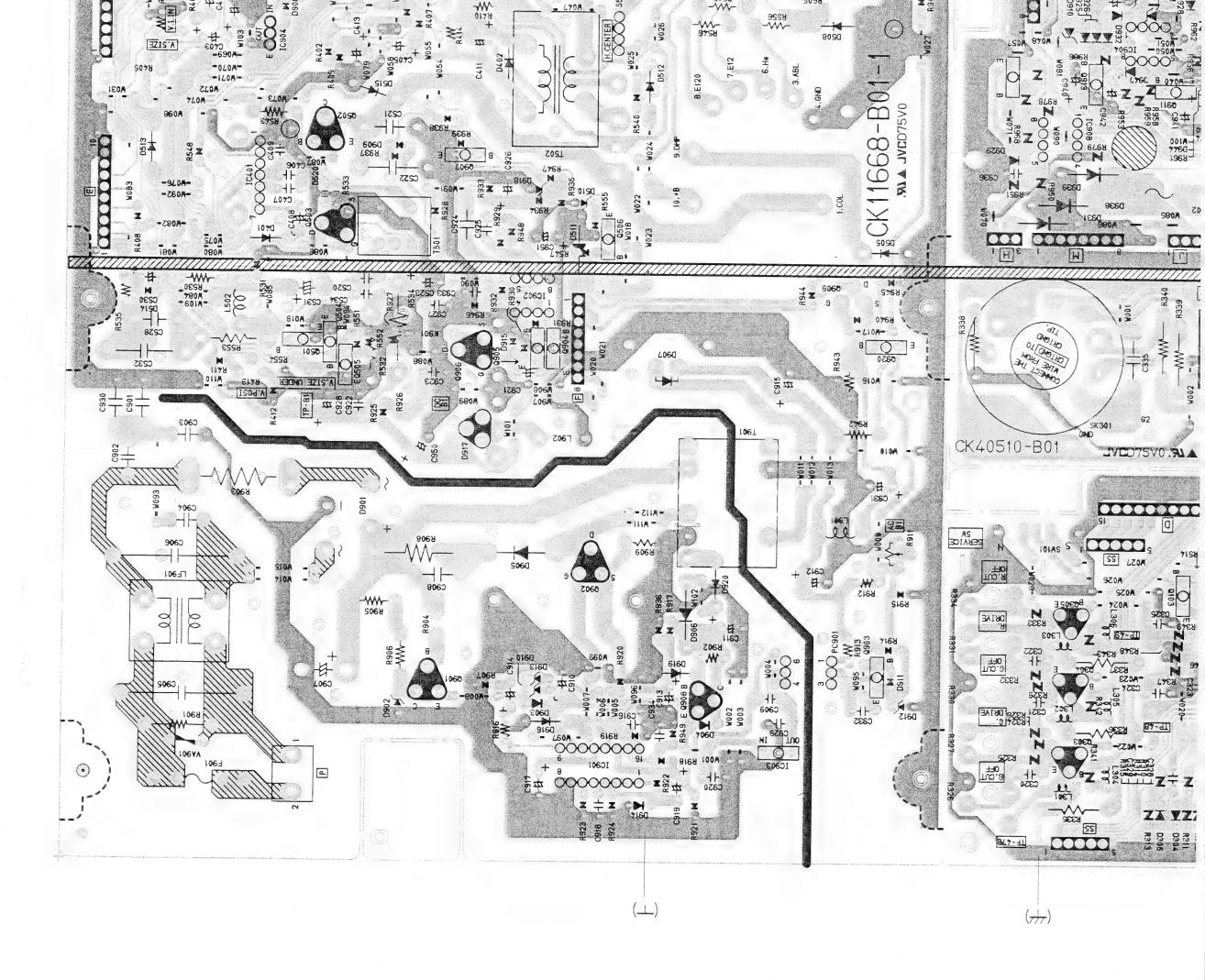
TM-600PN-E TM-600PN-E

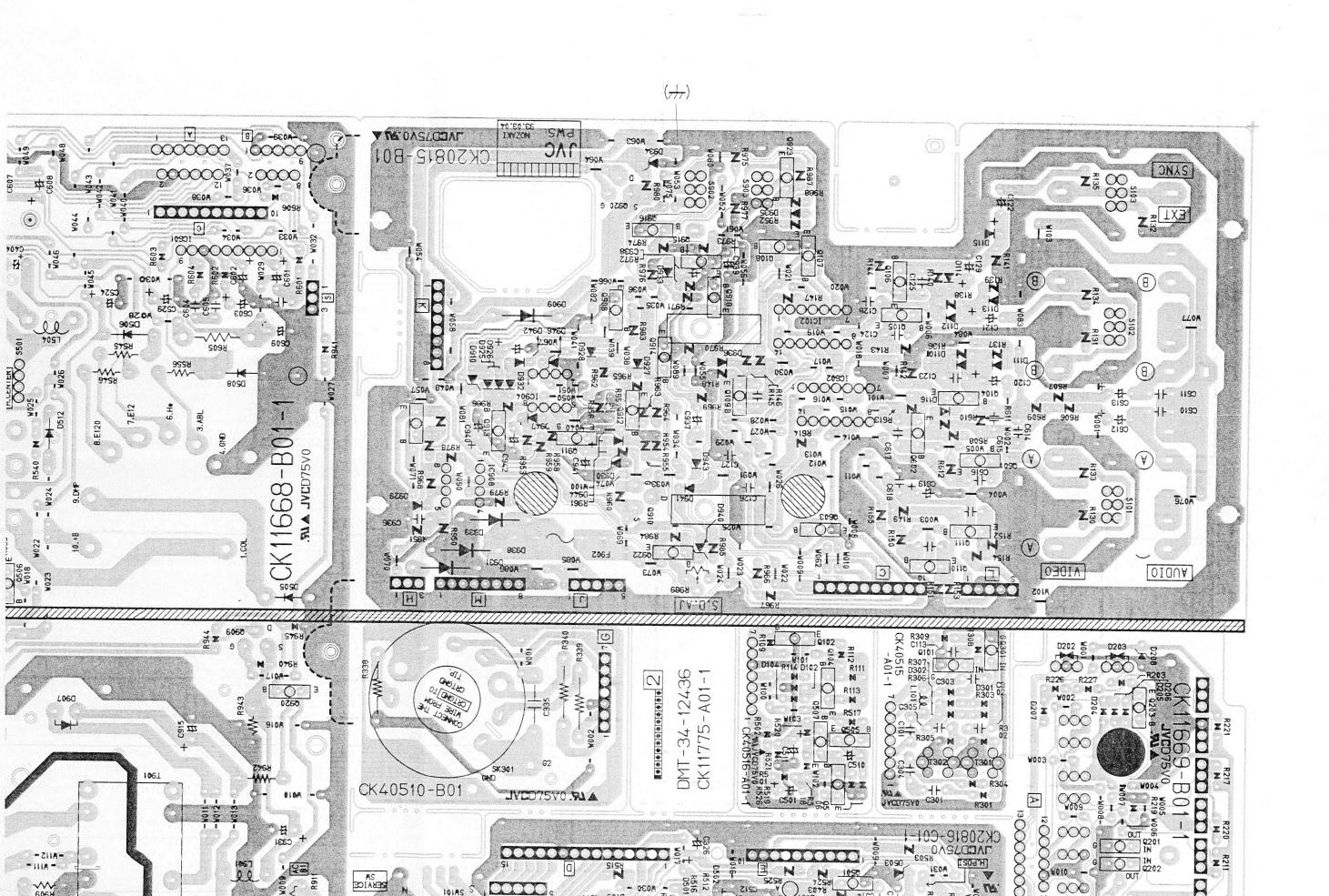


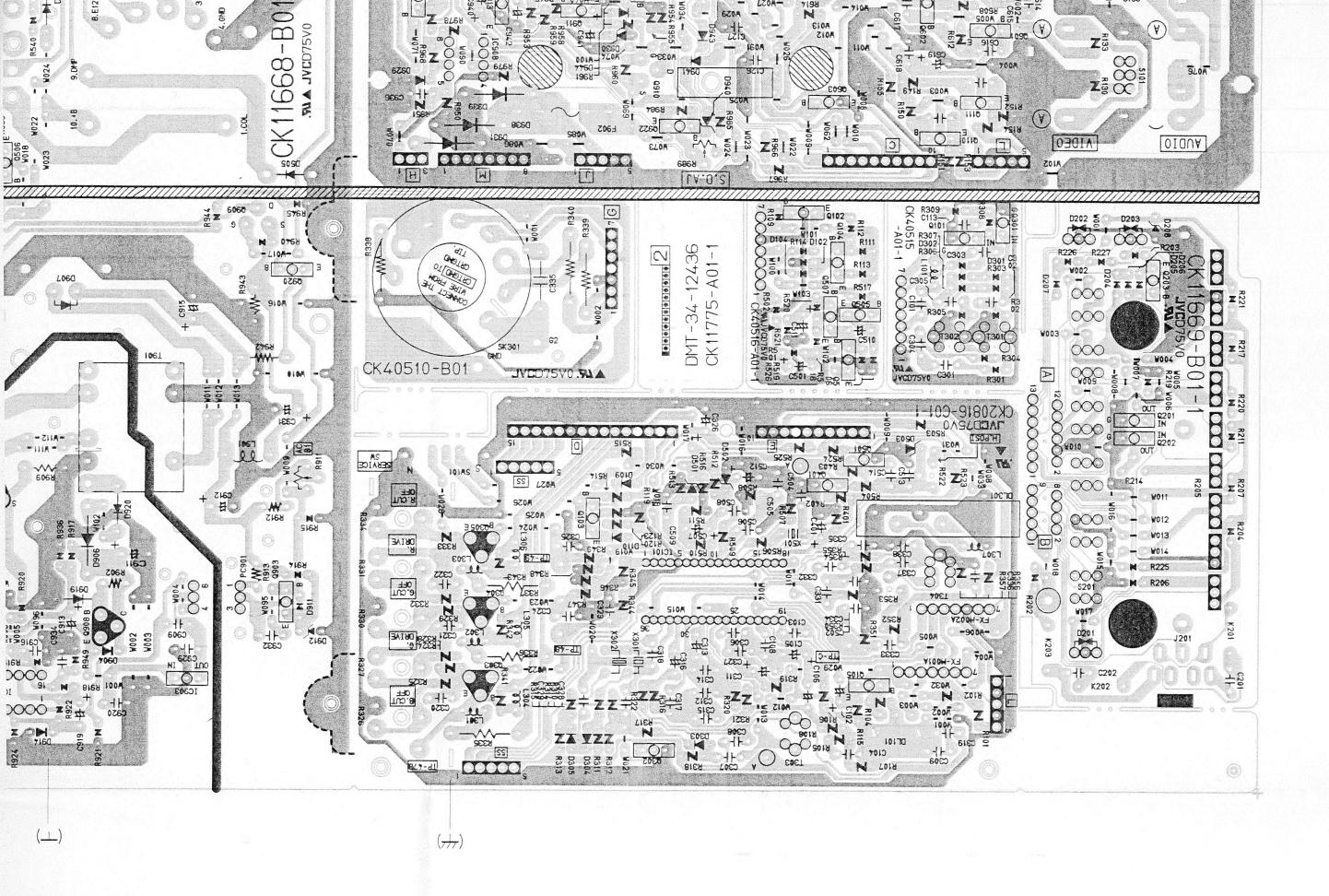


PWB BACK PATTERN









INSTALLATION INSTRUCTIONS RK-604E RACK MOUNT ADAPTER

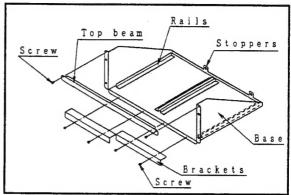
Thank you for purchasing the RK-604E Rack Mount Adapter. This rack mount adapter is designed specifically to install two TM-600PN color video monitors to the EIA 19° rack. Before installation, carefully read their instructions.

PARTS

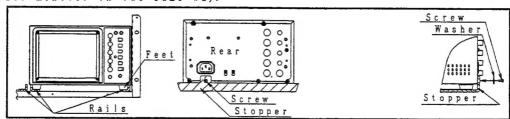
■Base		
■Top Bea	m (installed)	
■ Bracket	(installed)	
■Screw(i	nstalled)	

INSTALLATION

1. Remove the top beam and the two brackets, installed on the front of the base, by removing their screws (6 pieces).



2. After placing the feet of the monitor on the respective rails, while checking the rear of the monitor and the stopper on the base, adjust the location of the monitor so that the head of the screw, located below the AC inlet on the rear of the monitor, can be viewed through the hole of the stopper. Then after removing this screw and inserting the washer, re-tighten the screw. Install the other monitor in the same way.



3. After inserting the brackets under the respective monitors, reinstall each bracket using the two screws.
Also reinstall the top beam using the two screws.

CAUTION:

Make sure the heat coming from the monitors inside is properly ventilated by using fan unit when they are operated in the ambient temperature more than 30° C. Insufficient heat ventilation could result in a monitor malfunction.

EXTERNAL DIMENSIONS (W X H X D): 481 X 176 X 314mm (without monitors)

WEIGHT:

3.0 kg (without monitors)



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